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U. S. DEPARTMENT OF AGRICULTURE.

BUREAU OF PLANT INDUSTRY—BULLETIN NO. 66.

B. T. GALLOWAY, *Chief of Bureau.*

SEEDS AND PLANTS IMPORTED

DURING THE PERIOD FROM SEPTEMBER, 1900, TO DECEMBER, 1903.

INVENTORY No. 10; Nos. 5501—9896.

SEED AND PLANT INTRODUCTION AND DISTRIBUTION.

ISSUED FEBRUARY 8, 1905.

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1905.

BUREAU OF PLANT INDUSTRY.

B. T. GALLOWAY,
Pathologist and Physiologist, and Chief of Bureau.

VEGETABLE PATHOLOGICAL AND PHYSIOLOGICAL INVESTIGATIONS.

Albert F. Woods, *Pathologist and Physiologist in Charge,*
Acting Chief of Bureau in Absence of Chief.

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SEED AND PLANT INTRODUCTION AND DISTRIBUTION.

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SEED AND PLANT INTRODUCTION AND DISTRIBUTION.

SCIENTIFIC STAFF.

A. J. Pieters, *Botanist in Charge.*

W. W. Tracy, Sr., *Special Agent.*
S. A. Knapp, *Special Agent.*
David G. Fairchild, *Agricultural Explorer.*
John E. W. Tracy, *Expert.*
George W. Oliver, *Expert.*

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LETTER OF TRANSMITTAL.

U. S. Department of Agriculture,
Bureau of Plant Industry,
Office of the Chief,
Washington, D. C., May 5, 1904.

Sir: I have the honor to transmit herewith, and to recommend for publication as Bulletin No. 66 of the series of this Bureau, the accompanying manuscript entitled "Seeds and Plants Imported During the Period from September, 1900, to December, 1903."

This manuscript has been submitted by the Botanist in Charge of Seed and Plant Introduction and Distribution with a view to publication.

Respectfully,
B. T. Galloway,
Chief of Bureau.

Hon. James Wilson,
Secretary of Agriculture.

a

PREFACE.

The present inventory, No. 10 of our series, covers a number of introductions almost equal to the entire number included in the previous nine inventories. It is put forth as the first part of the record of the permanent work of this office with these introductions, and shows what seeds and plants have been introduced. The completion of the record requires a report of the disposition made of these seeds and the results obtained from the experimental work done in this country. Such records will appear from time to time as our different introductions are tested and either discarded or found to be valuable additions to the plants cultivated by American farmers and gardeners.

The introductory statement by Mr. Fairchild covers the general information in regard to the sources from which these introductions have been obtained, and I wish in addition to emphasize the fact that the seeds and plants represented by this inventory have all been distributed, and that the inventory is in no sense intended as a check list to enable persons to call for seeds and plants with which they would like to experiment.

A. J. Pieters,
Botanist in Charge.

Office of Seed and Plant
Introduction and Distribution,
Washington, D. C., May 4, 1904.

B. P. I.—105. S. P. I. D.—39

SEEDS AND PLANTS IMPORTED DURING THE PERIOD FROM SEPTEMBER, 1900, TO DECEMBER, 1903.

INTRODUCTORY STATEMENT.

This inventory of seeds and plants which have been collected by agricultural explorers, or received through other sources by this Office, covers the period from September, 1900, to December, 1903. It includes 4,396 accession inventory numbers. Since the last inventory was published in 1901 the explorers and special agents of this Office have continued their extensive searches after new and promising varieties of plants for introduction into this country. The notes furnished regarding the different introductions vary greatly with regard to their completeness and it is desired to point out clearly that this inventory makes no pretenses to being an embodiment of all the information we possess regarding the various seeds and plants listed. It is merely a collection, largely for use in this Office and by members of the State experiment stations, of the notes which accompanied the various seeds and plants when they were sent in. Their value will in many cases be more historical than explanatory. For some of the most important numbers, separate detailed reports have been issued in the form of bulletins or are being prepared for publication.

It will be noticed that no attempt has been made to follow the latest reforms in nomenclature, the Kew Index having been taken in most cases as a convenient guide in the spelling of the different scientific names.

The quantities of seeds or plants represented by these different numbers are, as a rule, small, and in the vast majority of cases it has been necessary to distribute them as soon as possible after arrival to competent experimenters throughout the country. It will therefore be, in most cases, impossible to furnish seeds or plants described in this inventory. If, however, special reasons can be shown by reputable experimenters why further introductions of certain species or varieties should be made, this Office will be glad to take the matter up, for it is desirous of introducing any new variety which may be called to its attention by plant breeders or others in a position to carry out consecutive and careful plant-introduction experiments.

Of the nearly 4,400 new introductions, a very large number represent work accomplished by the explorations of Mr. Barbour Lathrop, of Chicago, with whom the writer had the pleasure of being associated as Agricultural Explorer. Mr. Lathrop's explorations, which have required about four years of travel abroad, were carried out with the one practical object of making a reconnoissance of the useful plant possibilities of the world, and have successfully covered every continent and touched every important archipelago. Owing to the very out-of-the-way parts of the world visited by Mr. Lathrop, a large number of the seeds and plants secured by him are so rare that they will be exceedingly difficult to replace, and the Office considers itself extremely fortunate to have enlisted the cooperation of such a public-spirited man as Mr. Lathrop, who has conducted these various explorations almost entirely at his own expense, with no other idea than that of benefiting the American public through this branch of the work of the Department of Agriculture. No stronger evidence is needed of the practical value of plant-introduction work than that furnished by Mr. Lathrop's devotion to its study.

The collections of the several Department agricultural explorers which are represented in this inventory have also been gathered from a wide range of the earth's surface. The explorations of Dr. S. A. Knapp, the results of which are represented in the inventory, covered his second voyage to the Orient in 1901–2, and comprised a trip to Hawaii, Japan, China, Manila, the Straits Settlements, and British India in search of information bearing on the rice question of the South. Bavaria, Austria, Dalmatia, Greece, Egypt, Tunis, Algeria, and Spain were explored by the writer for brewing barleys, hops, fruits, and forage crops. Mr. C. S. Scofield made a careful survey of the leguminous fodder and green manure crops of Algeria and incidentally a study of the wheat varieties of France. Mr. M. A. Carleton made a second trip in 1900 through Austria and Roumania, into Russia and Central Asia, and returned through Turkey and Servia in search of cereals and forage crops. Mr. E. R. Lake, a specialist on American prunes, was sent in 1900 on a short trip to the prune-growing regions of France. Dr. J. N. Rose, of the U. S. National Museum, assisted us in 1901 in his botanizing trips in Mexico to secure a collection of desert plants and varieties of other plants of economic importance. Mr. Ernst A. Bessey was sent as agricultural explorer on two expeditions in search of hardy alfalfas and more resistant fruits for the Northwest. The first was through Russia to Turkestan in 1902, and the second to the Caucasus in 1903. Mr. Thomas H. Kearney and Mr. T. H. Means, the latter of the Bureau of Soils, were sent as explorers to the arid regions of Algeria, Tunis, and Egypt in search of better strains of Egyptian cotton and alkali-resistant grains and fodder plants. Mr. P. H. Rolfs, in charge of the Subtropical

Laboratory at Miami, Fla., visited for this Office in 1903 several islands in the West Indies in search of varieties of cassava and other suitable agricultural plants for southern Florida. Mr. G. Onderdonk, of Nursery, Tex., a specialist on stone fruits, made a trip to Mexico for this Office in search of varieties of this class of fruits for the Southern States.

In addition to the seeds and plants which these various exploring trips have brought in, the Office is indebted to correspondents all over the world for numerous interesting things which have been presented to it and for which credit is given in each separate instance under the various numbers.

It is desired to urge strongly in this introductory statement that the numbers which accompany these seeds and plants when they are sent out should be carefully preserved by those who receive them. By means of these inventory numbers the seeds and plants can always be identified. The machinery of the Office is so arranged that a permanent record is kept on file of all seeds and plants sent out, and the addresses of the experimenters to whom they are sent. This feature is considered essential, and unless carefully carried out there will be nothing on record to prevent reintroductions of plants which have proved by extensive trials to be unworthy of a place in American agriculture, and much annoyance and delay will be caused in the handling of those things which are successful.

While it is one of the aims of plant introduction to encourage those who can afford it to try new plants, such an object would not be gained by any attempt to supply those who—misguided, perhaps, by exaggerated newspaper accounts—apply for seeds or plants which they are not in a position to test successfully. All seeds are sent out with the idea that those who receive them are willing to take the pains to reply to queries from this Office regarding the success of their trial and to supply on request reasonable quantities of seeds, scions, or plants produced from the imported material. A failure on the part of an experimenter to respond to repeated inquiries or his refusal to assist in giving new introductions a wide distribution will affect unfavorably his standing in the list of capable experimenters which it is one of the objects of this plant introduction work to create.

DAVID G. FAIRCHILD,
Agricultural Explorer.

WASHINGTON, D. C., *April 18, 1904.*

INVENTORY.

5501 to 5512.

From Washington, D. C. Seeds from a number of crab-apple trees growing on the grounds of the Department of Agriculture. These trees were imported from Russia, by Prof. N. E. Hansen, in 1898. The numbers in parentheses are those under which the trees were received from Professor Hansen. They are as follows:

5501. Pyrus prunifolia edulis. (No. 4.)

5502. Pyrus prunifolia purpurea. (No. 5.)

5503. Pyrus prunifolia. (No. 6.)
Transparent.

5504. Pyrus prunifolia. (No. 7.)
Transparent.

5505. Pyrus prunifolia moscowiensis. (No. 8.)

5506. Pyrus prunifolia purpurea. (No. 9.)

5507. Pyrus prunifolia macrocarpa. (Nos. 10 and 11.)

5508. Pyrus prunifolia baccata. (No. 12.)

5509. Pyrus prunifolia baccata. (No. 15.)

5510. Pyrus prunifolia baccata. (No. 16.)

5511. Pyrus prunifolia. (No. 17.)

5512. Pyrus prunifolia. (No. 18.)

5513. Avena sativa. **Oat.**

From Torneå, Finland. Received through Messrs. Lathrop and Fairchild (No. 435), September 27, 1900.

North Finnish Black. "This seed is from the north province of Finland, and being grown at this high latitude should be early ripening. It is not, however, of first quality because the recent crops have been very poor." (*Fairchild.*)

5514. Avena sativa. **Oat.**

From Torneå, Finland. Presented by F. O. U. Nordberg, through Messrs. Lathrop and Fairchild (No. 435a, Aug. 6, 1900). Received September 27, 1900.

North Finnish Black. "One liter of black oats of the 1897 crop, which was so highly prized here that I could only get this small quantity. It should ripen earlier than No. 5513." (*Fairchild.*)

5515. Triticum vulgare. **Wheat.**

From Michaux, Va. Received September 27, 1900.

Banat. Grown in Virginia from seed imported by this Department in 1899.

5516. PASSIFLORA EDULIS. **Passion flower.**

From New South Wales, Australia. Presented by Dr. N. A. Cobb. Received September 27, 1900.

"This plant grows best in good soil at some distance from the coast, where there is little frost and an annual rainfall of about 50 inches. The plants are usually trellised about 6 feet apart, grow rapidly, and bear fruit the second year." (*Cobb.*) (See No. 1906, Inventory No. 5.)

5517. GLYCINE HISPIDA. **Soy bean.**

From Macassar, Celebes. Received through Messrs. Lathrop and Fairchild (No. 336, Jan., 1900), October 8, 1900.

Katjang-Koro.

5518. PHASEOLUS MUNGO. **Gram.**

From Macassar, Celebes. Received through Messrs. Lathrop and Fairchild (No. 337, Jan., 1900), October 8, 1900.

"A small bean used in soups." (*Fairchild.*)

5519. DOLICHOS sp. **Ussi bean.**

From Lombok, Dutch East Indies. Received through Messrs. Lathrop and Fairchild (No. 338, Jan., 1900), October 8, 1900.

Katjang Ussi.

5520. CUCURBITA sp. **Squash.**

From Amboina, Dutch East Indies. Received through Messrs. Lathrop and Fairchild (No. 339 Jan. 15, 1900), October 8, 1900.

"Native-grown squash, suited to a moist, warm climate. Said to be very sweet when cooked." (*Fairchild.*)

5521. PHASEOLUS LUNATUS. **Lima bean.**

From Lombok, Dutch East Indies. Received through Messrs. Lathrop and Fairchild (No. 340, January 7, 1900), October 8, 1900.

"A peculiar white and black striped lima bean." (*Fairchild.*)

5522. ARACHIS HYPOGAEA. **Peanut.**

From Matarum, Lombok, Dutch East Indies. Received through Messrs. Lathrop and Fairchild (No. 341, January 7, 1900), October 8, 1900.

"A large rough-shelled, three-seeded peanut, having thin shells and a good flavor." (*Fairchild.*)

5523. ORYZA SATIVA. **Rice.**

From Surabaya, Java. Received through Messrs. Lathrop and Fairchild (No. 342, January, 1900), October 8, 1900.

"Short-grained Java rice." (*Fairchild.*) (Injured in transit.)

5524. CAPSICUM ANNUUM. **Red pepper.**

From Macassar, Celebes. Received through Messrs. Lathrop and Fairchild (No. 343, January 10, 1900), October 8, 1900.

"A small variety of very hot red pepper generally used green in Macassar. Probably the same as that used in Java and other parts of the Dutch East Indies." (*Fairchild.*)

5525. CAPSICUM ANNUUM. **Red pepper.**

From Macassar, Celebes. Received through Messrs. Lathrop and Fairchild (No. 344, January 10, 1900), October 8, 1900.

"A long red pepper of the shape of the so-called Guinea pepper." (*Fairchild.*)

5526. CAPSICUM ANNUUM. **Red pepper.**

From Bali Island, Dutch East Indies. Received through Messrs. Lathrop and Fairchild (No. 345, January 7, 1900), October 8, 1900.

A long red variety.

5527. SOLANUM sp.

From Bali, Dutch East Indies. Received through Messrs. Lathrop and Fairchild (No. 346, January 7, 1900), October 8, 1900.

"A white-fruited species which is used on the *Rijstafel* or rice table of Europeans. Much like an eggplant, of which it may be only a variety." (*Fairchild.*)

5528. MOMORDICA sp.

From Macassar, Celebes. Received through Messrs. Lathrop and Fairchild (No. 347, January 11, 1900), October 8, 1900.

"A fruit called Paparé here. It is eaten raw. When mature it is very showy, with bright-red endocarp. Said by Paillieux and Bois to grow well in France." (*Fairchild.*)

5529. CITRUS LIMETTA. **Lime.**

From Macassar, Celebes. Received through Messrs. Lathrop and Fairchild (No. 348, January 11, 1900), October 8, 1900.

"A very thin-skinned, juicy lime of inferior flavor." (*Fairchild.*)

5530. CAPSICUM ANNUUM. **Red pepper.**

From Macassar, Celebes. Received through Messrs. Lathrop and Fairchild (No. 349, January 11, 1900), October 8, 1900.

A long red variety.

5531. CITRUS LIMONUM. **Lemon.**

From Banda, Dutch East Indies. Received through Messrs. Lathrop and Fairchild (No. 350, February 8, 1900), October 8, 1900.

"*Sauerbier*, a very large, thin-skinned, exceedingly juicy lemon of good flavor, sent through the kindness of Mr. Sauerbier from his own garden. The fruit examined was 3 inches in diameter, with smooth skin, not over one-quarter of an inch thick, and large oil glands. The flesh is composed of large cells which are much elongated in shape and therefore easily broken by pressure. The amount of juice is exceptionally large. Nearly three-fourths of an ordinary glassful was squeezed by hand from a single fruit. Juice of good flavor, somewhat aromatic, but the fruit was too ripe to judge fairly. The tree is said to be small. This is the finest lemon seen by us on the expedition, and its discovery was made by Mr. Lathrop." (*Fairchild.*)

5532. CITRUS LIMONUM. **Lemon.**

From Banda, Dutch East Indies. Received through Messrs. Lathrop and Fairchild (No. 351, February 8, 1900), October 8, 1900.

From the garden of Mr. Sauerbier. "Seeds from the remarkable lemon described in No. 5531. Its seedlings may produce its like." (*Fairchild.*)

5533. CITRUS LIMONUM. **Lemon.**

From Banda, Dutch East Indies. Received through Messrs. Lathrop and Fairchild (No. 352, February 8, 1900), October 8, 1900.

"Seeds from lemon said to have come from the same tree as No. 5531. The fruits from which these seeds were taken were smaller, but still of unusual size and excellence." (*Fairchild.*)

5534. CANARIUM AMBOINENSE. **Amboina almond.**

From Amboina, Dutch East Indies. Received through Messrs. Lathrop and Fairchild (No. 353, February 8, 1900), October 8, 1900.

"This is possibly the stateliest avenue tree in the world and forms in the famous garden of Buitenzorg, Java, the '*Canarium Allée*,' which is noted as the most beautiful avenue in existence. A valuable table oil is made from the kernels of the fruits and these are highly prized by Europeans, being eaten like almonds. If introduced into the Philippines they might be made to pay as a secondary crop." (*Fairchild.*)

5535. SOLANUM MELONGENA. **Eggplant.**

From Amboina, Dutch East Indies. Received through Messrs. Lathrop and Fairchild (No. 354, February 8, 1900), October 8, 1900.

"Fruit long, striped with red, purple, and white." (*Fairchild.*)

5536. CAPSICUM ANNUUM. **Red pepper.**

From Amboina, Dutch East Indies. Received through Messrs. Lathrop and Fairchild (No. 355, February 14, 1900), October 8, 1900.

"An excellent variety of egg-shaped red pepper." (*Fairchild.*)

5537. CAPSICUM ANNUUM. **Red pepper.**

From Singapore. Received through Messrs. Lathrop and Fairchild (No. 356, January 24, 1900), October 8, 1900.

"A long, slender variety of red pepper." (*Fairchild.*)

5538. CAPSICUM ANNUUM. **Red pepper.**

From Macassar, Celebes. Received through Messrs. Lathrop and Fairchild (No. 357, January 11, 1900), October 8, 1900.

"A small red pepper." (*Fairchild.*)

5539. **Forest tree.**

From Boela, Ceram Island, Dutch East Indies. Received through Messrs. Lathrop and Fairchild (No. 358, January 18, 1900), October 8, 1900.

"Seeds from a single fruit of a beautiful orange-red color; borne by a small forest tree with lanceolate dark-green leaves. Fruits borne in pairs, and are pulpy, jelly-like, and almost transparent. One of the showiest fruits I have ever seen. I do not know whether or not it is edible." (*Fairchild.*)

5540. **Forest tree.**

From Boela, Ceram Island, Dutch East Indies. Received through Messrs. Lathrop and Fairchild (No. 359, January 18, 1900), October 8, 1900.

"Fruit oblate spheroid, dark green, several-seeded with hard, smooth exocarp. Flesh brown and spongy. Not known to be edible." (*Fairchild.*)

5541. **Forest tree.**

From Boela, Ceram Island, Dutch East Indies. Received through Messrs. Lathrop and Fairchild (No. 360, January 18, 1900), October 8, 1900.

"One-seeded, purple-fleshed fruit, from clearing in virgin forest. Said to be poisonous." (*Fairchild.*)

5542. VICIA FABA. **Broad bean.**

From Dutch East Indies. Received through Messrs. Lathrop and Fairchild (No. 361, January 11, 1900), October 8, 1900.

"Sample of a variety of broad bean which is canned and sent from Holland to India, where it is cooked in water and eaten as a great delicacy by Europeans. Most excellent eating." (*Fairchild.*)

5543. **Shade tree.**

From Toeal, Kei Island, Dutch East Indies. Received through Messrs. Lathrop and Fairchild (No. 362, January 20, 1900), October 8, 1900.

"A rapidly growing shade tree resembling *Albizzia lebbek*, but with long cylindrical pods of dark-brown color. Suitable for Florida, Porto Rico, or any tropical region." (*Fairchild.*)

5544. MOMORDICA sp.

From Toeal, Kei Island, Dutch East Indies. Received through Messrs. Lathrop and Fairchild (No. 363, January 20, 1900), October 8, 1900.

"A small-fruited species growing wild in the island. Said to be eaten raw by the natives." (*Fairchild.*)

5545. SOLANUM MELONGENA. **Eggplant.**

From Toeal, Kei Island, Dutch East Indies. Received through Messrs. Lathrop and Fairchild (No. 364, January 20, 1900), October 8, 1900.

"A yellow-fruited species of *Solanum*, cooked and eaten by the natives. May prove valuable for breeding purposes." (*Fairchild.*)

5546. CAPSICUM ANNUUM. **Red pepper.**

From Gisser Island (a typical atoll near Ceram), Dutch East Indies. Received through Messrs. Lathrop and Fairchild (No. 365, February 3, 1900), October 8, 1900.

"A large oblong variety of red pepper." (*Fairchild.*)

5547. CITRUS DECUMANA. **Pomelo.**

From Sekar, Dutch New Guinea. Received through Messrs. Lathrop and Fairchild (No. 366, February 1, 1900), October 8, 1900.

"Seeds of a large and very sour variety of pomelo or shaddock presented by the Radja of Sekar, a village on the coast of Dutch New Guinea. The shaddock is native of the islands of the Malay Archipelago, being more particularly abundant in the Friendly Isles and Fiji. Introduced into India from Java and into the West Indies by Captain Shaddock, hence the name *Shaddock.* It is cultivated in most tropical countries." (*Fairchild.*)

5548.

From Wetter Island, Dutch East Indies. Received through Messrs. Lathrop and Fairchild (No. 367, January 23, 1900), October 8, 1900.

"Long purple fruit found on the shore of the island of Wetter. The pulp is soft like that of a plum. It is said not to be edible." (*Fairchild.*)

5549. CONVOLVULUS sp. (?)

From Dammer Island, Dutch East Indies. Received through Messrs. Lathrop and Fairchild (No. 368, January 22, 1900), October 8, 1900.

"A large vigorous vine with curious seed pods." (*Fairchild.*)

5550. CONVOLVULUS sp. (?)

From Dammer Island, Dutch East Indies. Received through Messrs. Lathrop and Fairchild (No. 369, January 22, 1900), October 8, 1900.

"Small-fruited vine which covers low trees and shrubs." (*Fairchild.*)

5551.

From Dammer Island, Dutch East Indies. Received through Messrs. Lathrop and Fairchild (No. 370, January 22, 1900), October 8, 1900.

"From vine not in flower, but of luxuriant growth, covering trees and shrubs." (*Fairchild.*)

5552. CUCURBITA sp. (?)

From Dammer Island, Dutch East Indies. Received through Messrs. Lathrop and Fairchild (No. 371, January 22, 1900), October 8, 1900.

"A vigorous cucurbitaceous vine, covering trees and shrubs and bearing large numbers of curious dry fruits resembling *Luffa*." (*Fairchild.*)

5553. CAPSICUM ANNUUM. **Red pepper.**

From Gisser Island, Dutch East Indies. Received through Messrs. Lathrop and Fairchild (No. 372, February 4, 1900), October 8, 1900.

"A cherry-shaped red pepper." (*Fairchild.*)

5554. CITRUS LIMETTA. **Lime.**

From Gisser Island, Dutch East Indies. Received through Messrs. Lathrop and Fairchild (No. 373, February 3, 1900), October 8, 1900.

"Seeds from a lime of very peculiar shape. Long and slender, with a decided beak at the lower end. Flavor inferior." (*Fairchild.*)

5555. CAPSICUM ANNUUM. **Red pepper.**

From Gisser Island, Dutch East Indies. Received through Messrs. Lathrop and Fairchild (No. 374, February 3, 1900), October 8, 1900.

"A small red pepper."

5556. CAPSICUM ANNUUM. **Red pepper.**

From Toeal, Kei Island, Dutch East Indies. Received through Messrs. Lathrop and Fairchild (No. 375, January 31, 1900), October 8, 1900.

"A small cherry-shaped red pepper." (*Fairchild.*)

5557. CONVOLVULUS sp. (?)

From Dobbo, Aru Islands, Dutch East Indies. Received through Messrs. Lathrop and Fairchild (No. 376, January 28, 1900), October 8, 1900.

"Seed from vine growing in the mangrove swamps near the town. Ornamental." (*Fairchild.*)

5558. CONVOLVULUS sp. (?)

From Dobbo, Aru Islands, Dutch East Indies. Received through Messrs. Lathrop and Fairchild (No. 377, January 28, 1900), October 8, 1900.

"Seeds from a plant growing near mangrove swamps on sandy soil." (*Fairchild.*)

5559. CUCURBITA sp. **Squash.**

From Sekar, Dutch New Guinea. Received through Messrs. Lathrop and Fairchild (No. 378, February 2, 1900), October 8, 1900.

"Seeds from a squash presented by the Radja of Sekar, a small village on the coast of New Guinea." (*Fairchild.*)

5560. ZEA MAYS. **Maize.**

From Amboina, Dutch East Indies. Received through Messrs. Lathrop and Fairchild (No. 379, February 7, 1900), October 8, 1900.

"A variety of Indian corn which is of such superior quality that it is shipped from the island of Amboina to many other points in the archipelago. A hard flinty variety, and worthy of trial in Porto Rico, Hawaii, and the Philippines." (*Fairchild.*)

5561. ARACHIS HYPOGAEA. **Peanut.**

From the Dutch East Indies. Received through Messrs. Lathrop and Fairchild (No. 380, February 7, 1900), October 8, 1900.

"A very large peanut, one of the most delicious we have ever tasted, probably from the island of Ternate." (*Fairchild.*)

5562.

From Letti Island, Dutch East Indies. Received through Messrs. Lathrop and Fairchild (No. 381, January 25, 1900), October 8, 1900.

"Small fruits with lemon-yellow pulp, very sour. Brought on board and sold by natives of Letti." (*Fairchild.*)

5563. CHAVICA OFFICINARUM. **Long pepper.**

From Macassar, Celebes. Received through Messrs. Lathrop and Fairchild (No. 382, January 22, 1900), October 8, 1900.

"A sample of so-called *Tjabeh aroij*, used in the Dutch East Indies as a condiment. It is very hot, and is much used by the natives in their curries. It is also used in medicine." (*Fairchild.*)

5564. CICCA NODIFLORA.

From Amboina, Dutch East Indies, Received through Messrs. Lathrop and Fairchild (No. 383, February 7, 1900), October 8, 1900.

"Seeds from fruit tree, the sap of which is used for poisoning arrows. The roots are used as a medicine for asthma. Syphilis is treated with a decoction of the leaves, and the sour fruits are used for making preserves. The seeds act as a purgative. The tree grows about 25 feet high." (*Fairchild.*)

5565. CAPSICUM ANNUUM. **Red pepper.**

From Fack Fack, Dutch New Guinea. Received through Messrs. Lathrop and Fairchild (No. 384, February 1, 1900), October 8, 1900.

"Very small red pepper found growing on a bush 4 feet high." (*Fairchild.*)

5566. CALOPHYLLUM sp.

From Saparoea Island, Dutch East Indies. Received through Messrs. Lathrop and Fairchild (No. 385, February 8, 1900), October 8, 1900.

"A giant tree growing in front of the Controlleur's house at Saparoea. One of the most beautiful shade trees I have ever seen." (*Fairchild.*)

5567. CUCUMIS SATIVUS. **Cucumber.**

From Macassar, Dutch East Indies. Received through Messrs. Lathrop and Fairchild, October 8, 1900.

"An excellent variety of uniform size and shape, especially suited for cultivation in the Tropics." (*Fairchild.*)

5568. STUARTIA PENTAGYNA.

From Gage, Tenn. Presented by Mr. J. H. H. Boyd, through Mr. Lyster H. Dewey, of the Division of Botany. Received October 17, 1900.

5569. HUMULUS LUPULUS. **Hop.**

From Auscha, Bohemia. Received through Mr. E. R. Lake, October 18, 1900.

Auscha Red.

5570. HUMULUS LUPULUS. **Hop.**

From Auscha, Bohemia. Received through Mr. E. R. Lake, October 18, 1900.

Saaz.

5571. THEA VIRIDIS. **Tea.**

From Ceylon. Received October 30, 1900.

Highest class "Jat," a wild indigenous tea.

5572 to 5585. **Leguminous forage plants.**

From Algeria. Presented by Doctor Trabut, Government Botanist of Algeria, through Mr. W. T. Swingle. Received November 2, 1900.

"This valuable collection comprises small amounts of the seed of a number of forage plants which are cultivated by Doctor Trabut at the Algerian experiment station at Rouïba. Many of these were introduced into culture by Doctor Trabut, and are now sent out of North Africa for the first time. Some of the plants occur in other parts of the Mediterranean region, but in general the forms of these species found growing in Algeria are more resistant to drought than those obtained elsewhere. This has proved true of the common vetch from Tunis, the narrow-leaved lupine or naturalized form of the Corsican lupine. All of these species are adapted for planting in autumn in the warmer regions of the South and Southwest. Unfortunately, only a small amount of seed of these species could be obtained. It is hoped that enough can be grown in this country to give a fair trial another year. There can be no doubt that all of the native North African forage plants deserve a most careful trial in the arid and semiarid regions on the Pacific slope. All of these are winter crops and should be sown in early autumn, since at that time there is sufficient moisture in the soil to enable the seed to germinate. The climate of North Africa is very mild in winter, and probably most of these species would be injured by severe frosts. They could, however, be grown in spring in Washington State and Oregon, where the winter would probably prove too severe to permit of their being sown in autumn." (*Swingle.*)

5572. VICIA CALCARATA. **Vetch.**

"This vetch is native to the Mediterranean region. The seed of this particular sort was obtained at Boghar in Algeria where the climate is very dry. This is one of the species introduced into culture by Doctor Trabut." (*Swingle.*)

5573. VICIA HIRTA. **Vetch.**

"This plant, which is usually considered to be a hairy form of *Vicia lutea*, occurs very commonly in Algeria and has been introduced into cultivation by Doctor Trabut. It reaches a height of 16 to 18 inches at the experiment station at Rouïba." (*Swingle.*)

5574. VICIA FULGENS. **Scarlet vetch.**

"An Algerian vetch with handsome red flowers. It is an annual and grows with extraordinary vigor, reaching a height of 6 to 8 feet and yielding an abundance of excellent forage. Doctor Trabut, who introduced the species into culture, reports that at the experiment station at Rouïba, near Algiers, it yields 40 tons of green fodder to the acre. The great drawback of this most promising vetch is that the pods when ripe snap open, especially under the influence of hot winds, and scatter the seed, rendering its collection very difficult and the seed in consequence high priced. It is sown in autumn before the first rains in Algeria, either alone or with winter oats. It occasionally produces seed abundantly. It is to be hoped that some region may be found in the United States which has a sufficiently humid atmosphere during the ripening period of the pods to prevent their scattering the seeds. It might be possible to breed varieties which would hold the seed better. This vetch is most likely to succeed in the Southern States and on the Pacific slope." (*Swingle.*) (See Nos. 3825 and 4336, inventory No. 8.)

5575. VICIA SATIVA. **Common vetch.**

"Doctor Trabut has been making comparative tests of all obtainable varieties of the common vetch at the Algerian Experiment Station at Rouïba. The one which proves best adapted to Algerian conditions is the present number, which is from the dry regions of Tunis." (*Swingle.*)

5576. VICIA BENGALENSIS. **Bengal vetch.**

"This name is given by the Kew Index as a synonym of *V. nissoliana*. It is one of the best of the numerous species of vetch grown at the Algerian Experiment Station at Rouïba. It somewhat resembles the scarlet vetch, attaining a considerable height." (*Swingle.*)

5572 to 5585—Continued.

5577. VICIA FABA. **Horse bean.**

"This is a dwarf form of horse bean which Doctor Trabut reports as growing wild 25 miles south of Teniat. He considers it to be undoubtedly the wild form of the cultivated broad beans and horse beans. It is utilized by the Arabs, but is probably of little value compared with the improved form, though it may resist drought better, since it comes from a dry region in Algeria." (*Swingle.*)

5578. MELILOTUS MACROSTACHYS. **Melilot.**

"This species of melilot, native to Algeria, differs from most of the sweet clovers in having no pronounced odor. In consequence of this it is readily eaten by cattle. It has succeeded very well at the Experiment Station at Rouïba, where it attains a height of from 3 to 6 feet." (*Swingle.*)

5579. TRIGONELLA CORNICULATA. **Small fenugreek.**

"This species, which has the same strong odor as fenugreek, from which it differs, however, in having very much smaller pods and seeds, grows very vigorously at the Experiment Station at Rouïba, where it attains a height of from 3 to 5 feet. It could not be used for feeding milch cows, as the strong odor would make the milk unsalable. It is, however, used for fattening stock and as a green manure. It is said to resist drought very well." (*Swingle.*)

5580. TRIGONELLA GLADIATA. **Trigonella.**

"This plant also resembles fenugreek in odor. It has been cultivated with some success at the Experiment Station at Rouïba." (*Swingle.*)

5581. SCORPIURUS VERMICULATA. **Rabbit's ear.**

"This plant is a half-prostrate annual and grows wild all through northern Algeria. It is said to furnish an excellent forage on good land and the Arabs eat the seeds. The pods, which are bent more or less into a circle, are as large as one's finger and lie on the ground. They are eaten greedily by the sheep and constitute one of their important foods on the plains of northern Algeria." (*Swingle.*)

5582. ONONIS AVELLANA. **Ononis.**

"This is said by Doctor Trabut to be a good green manure for heavy soils. It is found only in Algeria, where it occurs in few localities on clay hills." (*Swingle.*)

5583. LUPINUS ANGUSTIFOLIUS. **Narrow-leafed lupine.**

"This species is commonly grown by the Kabyles and Arabs, and is used by them as a substitute for coffee. It is the earliest maturing species grown in North Africa and is good for green manure. It is said to dislike an excess of lime in the soil." (*Swingle.*)

5584. LUPINUS TERMIS. **Egyptian or Corsican lupine.**

"This is considered by Doctor Trabut to be the best species for culture in North Africa. It is sown at the rate of about 100 pounds to the acre, in autumn, and it grows rapidly, and in February or March can be plowed under. It much resembles the white lupine, but is said to be taller and have larger seeds. It is a very promising species for culture in California." (*Swingle.*)

5585. LATHYRUS TINGITANUS. **Tangier flat pea.**

"This species, which is a native of North Africa, is considered by Doctor Trabut to be one of the best forage plants in Africa. It reaches a height of from 3 to 4 feet and drives out all other plants. Sown in autumn it prevents the growth of all weeds, and on the 16th of May gives a crop of 3½ tons of dry hay to the acre. It is sown at the rate of about 50 pounds of seed per acre and is sometimes sown with one-third the weight of winter oats. It is a beautiful plant, very vigorous, and probably has a great future as a forage plant in the South and Southwest. (*Swingle.*)

5586. NEOWASHINGTONIA sp. **Fan palm.**

From San Diego, Cal. Presented by Mr. T. S. Brandegee; collected in Cajon de Santa Maria, near Calamaguet, on the eastern shore of Lower California.

5587. HUMULUS LUPULUS. **Hop.**

From Spalt, Bavaria, Germany. Received through Mr. D. G. Fairchild (No. 461), November 19, 1900.

Spalt City. "Cuttings or 'Fächser' of the finest Spalt hops grown in the restricted area of Spalt, Bavaria. These Spalt hops are renowned throughout Germany as next to the Saaz and Auscha, the best in the world. They are exported from here in considerable quantities to America where they are used by the large brewers in the manufacture of their finest beers. In planting these cuttings it should be remembered that they have been taken in October and transported to America and may suffer in vigor by this unusual treatment. The cuttings are planted here four or five together in one hill, being placed upright in the ground some 3 inches apart and covered about 1½ to 2 inches with soil. The hills are from 3 to 4 feet apart each way. The soil, which is the most important item of any in hop culture, must be a sandy loam. In Spalt it is a disintegrated red sandstone, similar to the soil in the Bohemian hop region of Saaz. Only in the small region about the little village of Spalt do these famous hops develop their fine aroma and valuable lupulin contents. Before planting, the soil should be carefully worked to a depth of 2¾ to 3 feet and the culture should be scrupulously clean during the season. This is not a heavy bearer, one pound per pole being a maximum. Its value lies in its superior quality of aroma. The best grade of hop from which these cuttings are taken brings this year on the Spalt market over 15 cents per pound. Great care should be taken that no male hop plants are grown near these Spalt hops, as their presence induces a heavy seed production and an immediate lowering of the quality of the yield. Harvesting, sulphuring, etc., as usual." (*Fairchild.*)

5588. HUMULUS LUPULUS. **Hop.**

From Spalt, Bavaria, Germany. Received through Mr. D. G. Fairchild (No. 462, October 24, 1900), November 19, 1900.

Seed from the best *Spalt hops*, grown in the village of Massendorf. "This variety of hop produces very few seeds indeed, and these may be of distinct value for breeding purposes and for the selection of a more vigorous strain of superlative quality." (*Fairchild.*)

5589. COCHLEARIA ARMORACIA. **Horse-radish.**

From Biersdorf, Bavaria. Received through Mr. D. G. Fairchild (No. 457, October 19, 1900), November 12, 1900.

"Cuttings of a variety of Bavarian horse-radish which ranks among the best in Europe. It is much milder in flavor than the malin variety, and its method of cultivation is different." (*Fairchild.*) (See S. P. I. Circular No. 21.)

5590. HORDEUM DISTICHUM. **Barley.**

From Kitzing, Bavaria. Received through Mr. D. G. Fairchild (No. 458), November 26, 1900.

Lower Frankish *Kitzing* brewing barley. "The most noted Bavarian variety, and one of the best brewing barleys in the world. It is a heavy, thin-skinned sort containing a large percentage of starch. It was grown on a *heavy clay soil*, and should, according to the growers in Bavaria, be tried on a *light but not too sandy soil.* A change of soil is considered essential." (*Fairchild.*)

5591. HORDEUM DISTICHUM. **Barley.**

From Kitzing, Bavaria. Received through Mr. D. G. Fairchild (No. 459, October 22, 1900), November 26, 1900.

"This is the same as No. 5590, except that it was grown on light soil, and should, therefore, be tried on heavy clay soils in America." (*Fairchild.*)

5592. HORDEUM DISTICHUM. **Barley.**

From Würzburg, Bavaria. Received through Mr. D. G. Fairchild (No. 460, October 22, 1900), November 26, 1900.

Lower Frankish brewing barley. Essentially the same as Nos. 5590 and 5591. Suited to fairly light soils.

5593. HUMULUS LUPULUS. **Hop.**

From Wolnzach, Bavaria. Received through Mr. D. G. Fairchild (No. 462, October 25, 1900), November 19, 1900.

Cuttings from the Wolnzach hops. "These are late-ripening hops of excellent quality, but not so highly prized as those from Saaz or Spalt. Cuttings from 6-year-old stocks, suited to a friable loam; yield from $\frac{1}{4}$ to $\frac{1}{3}$ pound per pole; probably not so susceptible to soil conditions as the Saaz." (*Fairchild.*)

5594. HUMULUS LUPULUS. **Hop.**

From Wolnzach, Bavaria. Received through Mr. D. G. Fairchild (No. 463, October 25, 1900), November 19, 1900.

Seeds from Wolnzach hops.

5595 to 5608.

From the Government Laboratory, Georgetown, Demerara, British Guiana. Received through the Division of Chemistry, October 19, 1900.

A collection of sugar-cane arrows with fertile seeds sent by Mr. J. B. Harrison.

5595. (J. B. H. 74.)
5596. (J. B. H. 116.)
5597. (J. B. H. 790.)
5598. (J. B. H. 1485.)
5599. (J. B. H. 1850.)
5600. (J. B. H. 2093.)
5601. (J. B. H. 5041.)
5602. (J. B. H. 5044.)
5603. (J. B. H. 5201.)
5604. (J. B. H. 5443.)
5605. (J. B. H. 5444.)
5606. (J. B. H. 5454.)
5607. (J. B. H. 5717.)
5608. (J. B. H. 5774.)

5609. MELINIS MINUTIFLORA. **Molasses grass.**

From São Paulo, Brazil. Presented by the Brazilian minister, the Hon. Dr. J. F. de Assis-Brasil, through the U. S. Consul at São Paulo, September, 1900.

5610. VILLEBRUNEA INTEGRIFOLIA. **Assam rhea.**

From Calcutta, India. Presented by D. Prain, Superintendent of the Royal Botanic Garden, Calcutta. Received November 16, 1900.

(See Agric. Ledg., Calcutta, 1898, No. 15, for description of this fiber plant.)

5611. HUMULUS LUPULUS. **Hop.**

From Wolnzach, Bavaria. Received through Mr. D. G. Fairchild, November 19, 1900.

"A mixture of hop seeds from the drying room of Wolnzach." (*Fairchild.*)

5612. PASSIFLORA EDULIS. **Passion flower.**

From Auckland, New Zealand. Presented by J. P. Carolin, through Mr. George William Hill, Chief of the Division of Publications. Received November 21, 1900.

5613. ATRIPLEX LEPTOCARPA. **Saltbush.**

From Berkeley, Cal. Presented by the California Experiment Station, through Prof. Chas. H. Shinn. Received November 21, 1900.

5614. ATRIPLEX HALIMOIDES. Saltbush.

From Berkeley, Cal. Presented by the California Experiment Station, through Prof. Chas. H. Shinn. Received November 21, 1900.

5615. CINNAMOMUM CAMPHORA. Camphor.

From Berkeley, Cal. Presented by the California Experiment Station, through Prof. Chas. H. Shinn. Received November 21, 1900.

5616. VITIS VINIFERA. Grape.

From Saonara, Italy. Received through Mr. D. G. Fairchild, November 23, 1900, from Fratelli Sgaravatti.

Sultanina rosea.

5617 to 5621.

From Manila, P. I. Received July 1, 1900.

No descriptions furnished.

5617.	ERYTHRINA CARNEA.	**Dap-dap.**
5618.	BIXA ORELLANA.	**Achiote.**
5619.	SOLANUM MELONGENA.	**Eggplant.**
5620.	COIX LACHRYMA-JOBI.	**Job's tears.**
5621.	INGA LANCEOLATA.	

5622. HUMULUS LUPULUS. Hop.

From Tetschen, Bohemia. Received through Mr. D. G. Fairchild, November 30, 1900.

"Seed from wild hops growing on the grounds of the Experiment Station at Tetschen-Liebwerd." (*Fairchild.*)

5623. CLIANTHUS DAMPIERI.

From Roebourne, West Australia. Presented by Mr. W. F. Cusack. Received December 3, 1900.

"A beautiful garden flower and also good feed for stock. It will grow with 6 inches of rain per annum, or one day good rain in the year. The seed requires scorching or soaking in hot water." (*Cusack.*)

5624.

From Roebourne, West Australia. Presented by Mr. W. F. Cusack. Received December 3, 1900.

"A leguminous shrub 6 feet high. Splendid feed for horses, cattle, and sheep. It is smaller than 5623, erect instead of prostrate. A beautiful garden flower." (*Cusack.*)

5625.

From Roebourne, West Australia. Presented by Mr. W. F. Cusack. Received December 3, 1900.

Mundle bundle. "A good perennial tussock grass. Grows where the annual average rainfall is 14 inches, and the thermometer sometimes shows temperatures up to 127° F. in the shade." (*Cusack.*)

5626. Pela.

From Roebourne, West Australia. Presented by Mr. W. F. Cusack. Received December 3, 1900.

"A good annual. It grows on sandy soil very well with small rainfall." (*Cusack.*)

5627. RUBUS NUTKANUS. **Salmon berry.**

From Blaine, Wash. Presented by Mr. C. E. Flint. Received November 6, 1900.

A large red raspberry growing on the Pacific Coast of North America.

5628. TRITICUM VULGARE. **Wheat.**

From Portland, Oreg. Presented by Mr. R. C. Judson. Received December 4, 1900.

Yaroslaf winter wheat. Grown from No. 2792; imported from the Government of St. Petersburg, Russia, in March, 1899, by Mr. M. A. Carleton. Considered objectionable for Oregon because of bearded character.

5629. TRITICUM VULGARE. **Wheat.**

From Portland, Oreg. Presented by Mr. R. C. Judson. Received December 4, 1900.

Banatka winter wheat. Grown from No. 2956; imported by Mr. M. A. Carleton in March, 1899.

5630. TRITICUM VULGARE. **Wheat.**

From Portland, Oreg. Presented by Mr. R. C. Judson. Received December 4, 1900.

Sandomir winter wheat. Grown from No. 2958, imported by Mr. M. A. Carleton in March, 1899.

5631. HUMULUS LUPULUS. **Hop.**

From Schwetzingen, Germany. Received through Mr. D. G. Fairchild (No. 456, Nov. 6, 1900), December 5, 1900.

"Cuttings of the Schwetzingen hop, one of the best early varieties, ripening the middle of August. Not considered by Professor Braungart as so delicate as the 'Saaz' or 'Spalt,' and on this account may thrive better on American soils." (*Fairchild.*)

5632. CAESALPINIA BONDUCELLA.

From Manila, P. I. Received July, 1900.

This genus of leguminosæ contains some 40 species; inhabitants of the Tropics of both hemispheres. Robust, erect trees, shrubs, or woody prickly climbers; leaves large; flowers showy, yellow. In some parts of India it grows at an altitude of 2,500 feet. Oil from the seeds is useful in convulsions and palsy, debility after fever, and other diseases. Is said to soften the skin and remove pimples. The seeds are used instead of quinine, and also as an ointment. In disorders of the liver the leaves are considered very efficacious. The nuts are used for making bracelets and necklaces. The seeds are used by children in place of marbles and in other games. The root is also used for medical purposes.

5633. JUGLANS REGIA. **Walnut.**

From Mettmenstetten, Switzerland. Presented by Hon. A. Lieberknecht, U. S. Consul at Zürich.

5634. GARCINIA MANGOSTANA. **Mangosteen.**

From Ceylon. Received through Mr. D. G. Fairchild, December 7, 1900. Presented by Dr. Valentine Duke, of Newara, Eliya.

Fruits covered with a coating of paraffin to preserve the germinative power of the seeds.

5635. TRITICUM VULGARE. **Wheat.**

From Kurman-Kemelchi, Central Crimea. Received through Mr. M. A. Carleton, December 12, 1900.

Crimean. "A hard red winter wheat, one of the best in the world. Adapted for trial in Kansas, Oklahoma, northern Texas, Missouri, and southern portions of Iowa and Nebraska." (*Carleton.*)

5636. TRITICUM VULGARE. **Wheat.**

From Altonau, near Melitopol, in northern Taurida. Received through Mr. M. A. Carleton, December 12, 1900.

"Similar to No. 5635, but from a rather colder latitude and not ripening quite so early. Adaptation like No. 5635." (*Carleton.*)

5637. TRITICUM VULGARE. **Wheat.**

From Altonau, near Melitopol, in northern Taurida. Received through Mr. M. A. Carleton, December 12, 1900.

Girka winter wheat. "A beardless variety, soft-grained, but very hardy. Adaptation like No. 5635." (*Carleton.*)

5638. TRITICUM VULGARE. **Wheat.**

From Constantinovskol, 40 miles east of Stavropol, in north Caucasus. Received through Mr. M. A. Carleton, December 12, 1900.

Ulta. "A hard, red-grained, bearded, winter variety, very resistant to cold and drought. Adapted for trial as a winter wheat in Iowa, Nebraska, and the southern portions of Wisconsin, Minnesota, and South Dakota, and eastern Colorado. An excellent variety for all of Kansas and northern portions of Missouri and Oklahoma." (*Carleton.*)

5639. TRITICUM DURUM. **Wheat.**

From Uralsk Territory, Russia. Received through Mr. M. A. Carleton, December 12, 1900.

Kubanka. "One of the best macaroni wheats known. Sown in the spring. Admirably adapted for growing in the semiarid regions, between the one hundredth meridian and the Rocky Mountains, and North Dakota to Texas, and also in New Mexico, Arizona, Utah, eastern Oregon, and the Palouse country." (*Carleton.*)

5640. TRITICUM VULGARE. **Wheat.**

From Padi, Saratov, Russia. Received through Mr. M. A. Carleton, December 12, 1900.

Padi. "A beardless, soft, or semihard winter wheat. Adapted to all the northern winter wheat States, from New York to Kansas and southward to the thirty-fifth parallel." (*Carleton.*)

5641. TRITICUM VULGARE. **Wheat.**

From Starobelsk, Kharkof, Russia. Received through Mr. M. A. Carleton, December 12, 1900.

Kharkof. "A bearded, hard, red, winter wheat, similar to No. 5635, but coming from a region much farther north and therefore extremely hardy. Especially resistant to piercing, dry, winter winds, where there is little snowfall. Admirably adapted for trial as a winter wheat in Minnesota, South Dakota, Iowa, northern Nebraska, Wisconsin, and perhaps southern North Dakota." (*Carleton.*)

5642. TRITICUM DURUM. **Wheat.**

From Ambrocievka, 20 miles northeast of Taganrog, in the Don Territory, Russia. Received through Mr. M. A. Carleton, December 12, 1900.

Yellow Gharnovka. "A macaroni wheat similar to No. 5643, but having yellow grains. Sown in the spring. Adapted for trial in the most arid portions of the United States." (*Carleton.*)

5643. TRITICUM DURUM. **Wheat.**

From Ambrocievka, 20 miles northeast of Taganrog, in the Don Territory, Russia. Received through Mr. M. A. Carleton, December 12, 1900.

Gharnovka. "The best macaroni wheat from the vicinity of Taganrog. Sown in the spring. Adapted for trial in the most arid portions of the United States." (*Carleton.*)

5644. TRITICUM DURUM. **Wheat.**

From Ambrocievka, 20 miles northeast of Taganrog, in the Don Territory, Russia. Received through Mr. M. A. Carleton, December 12, 1900.

Velvet Don. "An excellent macaroni wheat with *black beards.* Sown in the spring. Adaptation same as for No. 5643." (*Carleton.*)

5645. TRITICUM DURUM. **Wheat.**

From Ambrocievka, 20 miles northeast of Taganrog, in the Don Territory, Russia. Received through Mr. M. A. Carleton, December 12, 1900.

Black Don. "A *black-chaff* macaroni wheat. Sown in the spring. This wheat and the two preceding numbers, however, might be sown in November or December with good results in Texas, New Mexico, Arizona, and southern California. Adaptation same as for No. 5643." (*Carleton.*)

5646. TRITICUM DURUM. **Wheat.**

From Taganrog, Don Territory, Russia. Received through Mr. M. A. Carleton, December 12, 1900.

Gharnovka. "A spring wheat, but may be sown in late autumn south of the 35th parallel. This and No. 5643 are the best of the Taganrog macaroni wheats. Adaptation same as for three preceding numbers." (*Carleton.*)

5647. PANICUM MILIACEUM. **Proso.**

From Uralsk Territory, Russia. Received through Mr. M. A. Carleton, December 12, 1900.

White Ural. "The best sort for milling and extremely drought resistant. Adapted to growing in all semiarid districts west of the Mississippi River." (*Carleton.*)

5648. PANICUM MILIACEUM. **Proso.**

From Uralsk Territory, Russia. Received through Mr. M. A. Carleton, December 12, 1900.

Yellow Ural. "A variety of excellent quality, yielding heavily, and very resistant to drought. Adaptation same as No. 5647." (*Carleton.*)

5649 to 5686. PRUNUS DOMESTICA. **Prune.**

From France. Received through Mr. E. R. Lake, December 8, 1900. A collection of French grafted stock, as follows:

5649.

Cœur de bœuf. From Salvetat, Carcassonne, France. (Lake No. 1.)

5650.

Chaproni. From Vallerand, Traverny, France. (Lake No. 2.)

5651.

Giant. From Barbier, Orleans, France. (Lake No. 3.)

5652.

Isjum Erik. From Barbier, Orleans, France. (Lake No. 4.)

5653.

Des Béjonniers. From Barbier, Orleans, France. (Lake No. 5.)

5654.

Quetsche sucré. From Barbier, Orleans, France. (Lake No. 6.)

5655.

Mirabelle de Metz. From Barbier, Orleans, France. (Lake No. 7.)

5649 to 5686—Continued.

5656.

Sainte Catherine. From Barbier, Orleans, France. (Lake No. 8.)

5657.

Bleu de Belgique. From Rothberg, Gennevilliers, France. (Lake No. 9.)

5658.

Jaune d'Agen. From Rothberg, Gennevilliers, France. (Lake No. 10.)

5659.

The Czar. From Rothberg, Gennevilliers, France. (Lake No. 11.)

5660.

Grand Duc. From Rothberg, Gennevilliers, France. (Lake No. 12.)

5661.

Altesse. From Rothberg, Gennevilliers, France. (Lake No. 13.)

5662.

Big rose. From Croux et Fils, Paris, France. (Lake No. 14.)

5663.

Quetsche de Letricourt. From Croux et Fils, Paris, France. (Lake No. 15.)

5664.

Belle de Louvrain. From Croux et Fils, Paris, France. (Lake No. 16.)

5665.

Surpasse monsieur. From Croux et Fils, Paris, France. (Lake No. 17.)

5666. (Number not occupied.)

5667.

Tardive musque. From Baltet Frères, Troyes, France. (Lake No. 19.)

5668.

Mirabelle grosse. From Baltet Frères, Troyes, France. (Lake No. 20.)

5669.

Mirabelle petite. From Baltet Frères, Troyes, France. (Lake No. 21.)

5670.

Mirabelle précoce. From Baltet Frères, Troyes, France. (Lake No. 22.)

5671.

Mirabelle tardive. From Baltet Frères, Troyes, France. (Lake No. 23.)

5672.

De Norbet. From Baltet Frères, Troyes, France. (Lake No. 24.)

5673.

Monsieur hâtif. From Baltet Frères, Troyes, France. (Lake No. 25.)

5674.

Précoce de Tours. From Baltet Frères, Troyes, France. (Lake No. 26.)

5675.

Prince Englebert (strain). From Baltet Frères, Troyes, France. (Lake No. 27.)

5649 to 5686—Continued.

5676.
Reine Claude d' Ouillins. From Baltet Frères, Troyes, France. (Lake No. 28.)

5677.
Reine Claude d' Althau. From Baltet Frères, Troyes, France. (Lake No. 29.)

5678.
De Montfort. From Baltet Frères, Troyes, France. (Lake No. 30.)

5679.
D' Agen améliorée. From Baltet Frères, Troyes, France. (Lake No. 31.)

5680.
Quetsche de Dorel. From Baltet Frères, Troyes, France. (Lake No. 32.)

5681.
Reine des Mirabelles. From Baltet Frères, Troyes, France. (Lake No. 33.)

5682.
Reine Victoria. From Fleury-Meudon, near Paris, France. (Lake No. 34.)

5683.
Violet prune. From Fleury-Meudon, near Paris, France. (Lake No. 35.)

5684.
Sannois quetsche. From Sannois, France. (Lake No. 36.)

5685.
Reine Claude violette (strain). From Sannois, France. (Lake No. 37.)

5686.
Gloire d' Épinay. From Epinay, France. (Lake No. 38.)

5687. PYRUS MALUS. **Apple.**

From France. Received through Mr. E. R. Lake, December 8, 1900.

Transparente de Croncels. (Lake No. 39.)

5688. PYRUS MALUS. **Apple.**

From France. Received through Mr. E. R. Lake, December 8, 1900.

Transparente de Zurich. (Lake No. 40.)

5689. VITIS VINIFERA. **Grape.**

From France. Received through Mr. E. R. Lake, December 8, 1900.

Gamay. (Lake No. 41.)

5690 to 5744. PYRUS spp. **Apple.**

From France. Received through Mr. E. R. Lake, December 8, 1900. A collection of ornamental apples, as follows:

5690. SEROTINA.
5691. ILLENT ARGENTE.
5692. OBLONGA.
5693. JOHN DOWNIE.
5694. PAUL'S IMPERIAL.
5695. SPECTABILIS IMPERIAL.
5696. PULCHELLA.
5697. SPECIOSA.
5698. SULFUREA.
5699. ATROPURPUREA.
5700. NIVEA POLYPETALA.
5701. FASTIGIATA.
5702. FLAVA.
5703. INTERMEDIA.
5704. TURBINATA.
5705. COERULESCENS.
5706. HALLEANA.
5707. VESPER ROSE.
5708. MARENGO.
5709. TENORII CARNEA PLENA.
5710. AMPLA.
5711. PRUNIFOLIA PENDULA.
5712. MINNESOTA.
5713. SPHAEROCARPA.

5690 to 5744—Continued.

5714. GENERAL GRANT.
5715. TARDIV D'HIVER.
5716. RINGO.
5717. PULCHRA.
5718. KAIDO.
5719. MAGNIFICA.
5720. NIGRA.
5721. EDULIS.
5722. ORANGE.
5723. LADY ELGIN.
5724. TRANSLUCENS.
5725. MONTREAL BEAUTY.
5726. LUTESCENS.
5727. MAGNIFICA.
5728. FLAVESCENS.
5729. CIRE.
5730. LONGIFOLIA.
5731. MAXIMA.
5732. À FLEUR DOUBLE.
5733. FASTIGIATA BIFERA.
5734. WHITNEY.
5735. À FRUIT BLANC.
5736. QUAKER BEAUTY.
5737. IBRIC?
5738. SPECTABILIS IMPERIAL REVENI.
5739. NIKITA FLORIBUNDA.
5740. VAN WYCK.
5741. HYSLOP.
5742. THE FAIRY.
5743. TORINGO.
5744. YELLOW SIBERIAN.

5745. EUCALYPTUS GLOBULUS.

From San Francisco, Cal. Received through Trumbull and Beebe, July 14, 1900.

5746 to 5750. TRIFOLIUM PRATENSE. **Red clover.**

From Hamburg, Germany. Received December 14, 1900. A collection of seeds of various European strains, as follows:

5746. ENGLISH.
5747. HUNGARIAN.
5748. ITALIAN.
5749. RUSSIAN.
5750. SILESIAN.

5751. ANDROPOGON RUFUS. **Jaragua.**

From Matto Grosso Province, Brazil. Presented by the Brazilian minister, Hon. J. F. de Assis-Brasil, December 1, 1900.

A native fodder grass called by the Portuguese "provisorio." Described by Mr. Assis-Brasil in his book on Brazilian agriculture. (See letter of October, 1899.)

5752. ARCTOSTAPHYLOS sp. **Pendicuas.**

From Celaya, Mexico. Presented by Prof. Felix Foëx. Received December 10, 1900.

"The brown berries of this plant are edible. When fresh they are not disagreeable, having a fresh subacid flavor. When dried they are nearly tasteless, but are used in great quantities medicinally. An infusion is used for catarrh and headaches. The tree which produces them is very ornamental." (*Foëx.*)

5753. CARICA HETEROPHYLLA. **Jarrilla.**

From Celaya, Mexico. Presented by Prof. Felix Foëx. Received December 10, 1900.

"A curious fruit, being *drunk* as one would swallow a raw egg, and not eaten. The name is *Jarrilla* or 'little pitcher,' because it is shaped like a pitcher and is always full of water. The water contained in it is fresh and slightly acid, resembling lemon juice. When the fruit is taken from the plant it acquires in a few days a bitter taste, something like lemon peel, but without its aroma. The plant is a perennial, half climber, and grows wild on the hills around Celaya." (*Foëx.*)

5754. TRITICUM DURUM. **Wheat.**

From Matagalpa, Nicaragua. Presented by Hon. Isaac A. Manning, U. S. consular agent. Received December 17, 1900.

Nicaragua. Grown at an elevation of 2,200 feet.

5755. CUCUMIS MELO. **Muskmelon.**

From Erfurt, Germany. Received December 13, 1900.

Coral Reef. This is a cantaloupe of very striking appearance, the rind being studded with warty excrescences. The melon is bright yellow, with reddish markings, small seed cavity, and greenish yellow flesh. If planted in frames in winter it ripens fruit in early summer.

5756. HORDEUM DISTICHUM. **Barley.**

From Pilsen, Austria. Received through Mr. D. G. Fairchild (No. 466, November 7, 1900), February 9, 1901.

Mixed barley used for brewing the original Pilsen beer; said by the brewing master of the great Pilsen "Urquelle" Brewery to compare favorably with *Hanna* barley.

5757. HUMULUS LUPULUS. **Hop.**

From Polepp, Bohemia. Received through Mr. D. G. Fairchild (No. 469, November 14, 1900), December 18, 1900.

Seed from the drier in Polepp of the *Semsch Red* variety.

5758. HUMULUS LUPULUS. **Hop.**

From Polepp, Bohemia. Received through Mr. D. G. Fairchild (No. 470), December 18, 1900.

Red Semsch. "This variety originated in the immediate neighborhood of Polepp. It was discovered in 1853 as a sport among the so-called 'Tschims' hops, which were then grown here in Polepp, by Wenzel Semsch, a hop grower then only 20 years of age. This hop is earlier than the Saaz variety and more productive. It is remarkably uniform in time of blooming and ripening, and has been sent all over Bohemia and Alsatia, and thousands of cuttings go every year to Saaz, where they are planted. The largest proportion of Saaz hops comes from these cuttings. The exact locality of the garden from which these cuttings were taken I can not positively affirm further than that it is in the renowned Polepp or Polepp-Platte region, which is famous through its production of a quality of hop which often in good years approaches very closely to that of the best Saaz variety. The important facts are that it is an August-ripening hop of very uniform maturity and possessed of a very fine aroma and 'bitter' (so fine in fact that it is everywhere reported as being used for mixing with Saaz hops as a substitute), and a productiveness which stands to the Saaz hop as 5 to 3 in proportion; 180 poles will yield 110 pounds of hops, while it requires about 300 poles of the Saaz to yield as much. The soil upon which these hops are grown is a dark friable loam with a subsoil of gravel, in strong contrast with the soil of Saaz or Spalt, which is so-called perm or disintegrated red sandstone. The whole Polepp region, which is the largest single stretch of hop country in Bohemia, has this dark, rich, alluvial soil. Formerly the whole valley bottom was a peat bog. Fine sand is often used to lighten the soil. It is strewn along the rows and worked in. For further particulars regarding the origin of this Semsch hop, see No. 5759." (*Fairchild.*)

5759. HUMULUS LUPULUS. **Hop.**

From Werbitz, Bohemia. Received through Mr. D. G. Fairchild (No. 471), December 18, 1900.

Semsch red. "Cuttings of the original specimen from the garden of the son of Wenzel Semsch, to whose efforts the production and distribution of this remarkable hop are due." (*Fairchild.*)

5760. HUMULUS LUPULUS. **Hop.**

From Saaz, Bohemia. Received through Mr. D. G. Fairchild (No. 475, November 19, 1900), December 18, 1900.

Saaz. One-year-old plants of the original *Saaz* hop. This variety has without doubt the finest "bitter" and best "aroma" of any known sort, but its small yield makes it an unprofitable kind to raise. It requires often from 300 to 480 plants to produce 110 pounds of hops, while 180 poles of the *Semsch red* will produce the same amount. These plants come from the city region of Saaz, where the soil is a brick-red broken-down sandstone of the Lower Permian formation.

5761. COCHLEARIA ARMORACIA. **Horse-radish.**

From Malin (Kuttenberg), Bohemia. Received through Mr. D. G. Fairchild (No. 479, November 22, 1900), December 18, 1900.

Malin. The finest flavored, sharpest horse-radish in the world, being cultivated in a different way from that generally practiced in America. The marketable shoots are only one season old instead of several. (See Circular No. 1, Section of Seed and Plant Introduction.)

5762. CYDONIA VULGARIS. **Quince.**

From Carlovitz, Slavonia. Presented by Director Hess, of the Agricultural School of Laun, Bohemia, through Mr. D. G. Fairchild (No. 473, November 15, 1900). Received December 18, 1900.

Cuttings from a tree that bore fruit weighing 14 ounces, of excellent shape, and of a deeper yellow than most quinces seen in America. Said to be an indigenous Slavonian variety.

5763. ARACHIS HYPOGAEA. **Peanut.**

From Washington, D. C. Seed of No. 4253, grown during the season of 1900 on the Potomac Flats.

5764 to 5766. GLYCINE HISPIDA. **Soy bean.**

From Washington, D. C. Three varieties of soy beans from Japan, grown during the season of 1900 on the Potomac Flats.

5764. COMMON. (S. P. I., No. 4912.)

5765. BEST WHITE. (S. P. I., No. 4913.)

5766. BEST GREEN. (S. P. I., No. 4914.)

5767. PISTACIA VERA × P. TEREBINTHUS.

From San Francisco, Cal. Presented by Mr. G. P. Rixford, through Mr. W. T. Swingle. Received December, 1900.

"This number comprises the fruits of the terebinth tree ripened near San Francisco. Most of these fruits contain no seed, although they look very plump and have a perfectly developed pit or stone. According to Mr. Rixford, the fruits which are decayed or with dark-purple exteriors are the ones which most often contain seeds. The majority of the fruits vary from wine color to pink and are more or less studded over with white specks. The flesh is very thin, probably only about one thirty-second of an inch." (*Swingle.*)

5768. HUMULUS LUPULUS. **Hop.**

From Tettnang, Bavaria. Received from Mr. J. A. Bueble, through Mr. D. G. Fairchild (No. 464, November 4, 1900), December 26, 1900.

"Sets of the earliest ripening hop variety in Europe, often maturing by the end of July. They occupy a special place on the European hop market, being used by many breweries for brewing their first summer beer." (*Fairchild.*)

5769. BETA VULGARIS. **Sugar beet.**

From Paris, France. Received February, 1900.

Vilmorin's French Very Rich.

5770. BETA VULGARIS. **Sugar beet.**

From Germany. Received February, 1900.

Strandes Kleinwanzleben.

5771. BETA VULGARIS. **Sugar beet.**

From Germany. Received February, 1900.

Hoernings Kleinwanzleben.

5772. BETA VULGARIS. **Sugar beet.**

From Germany. Received February, 1900.

Dippes Kleinwanzleben Elite.

5773. BETA VULGARIS. **Sugar beet.**

From Utah. Received February, 1900.

American-grown seed. From Lehi, Utah.

5774. CUCUMIS MELO. **Winter muskmelon.**

From Arizona. Received December 29, 1900.

Seed grown at Phoenix, Ariz., from No. 149, originally imported from New Bokhara, Turkestan, by Prof. N. E. Hansen, February, 1898.

5775. VACCINIUM VITIS-IDAEA. **Foxberry.**

From Finland. Presented by Dr. Gösta Grotenfeld. Received December 31, 1900.

5776. OXYCOCCUS PALUSTRIS. **Small cranberry.**

From Finland. Presented by Dr. Gösta Grotenfeld. Received December 31, 1900.

5777. QUEBRACHIA LORENTZII. **Quebracho colorado.**

From La Plata, Argentina. Presented by Dr. Carlos Spegazzini. Received January 4, 1900.

"A magnificent slow-growing tree, with a wood like iron, containing much tannic acid. Last year's seeds from Salta Province." (*Spegazzini.*)

5778. MACHAERIUM TIPU. **Tipu.**

From La Plata, Argentina. Presented by Dr. Carlos Spegazzini. Received January 4, 1900.

"Leguminosæ; beautiful tree for gardens and forest, rapid grower, producing excellent wood for building purposes." (*Spegazzini.*)

5779. ELYMUS ANDINUS. **Coiron flor.**

From La Plata, Argentina. Presented by Dr. Carlos Spegazzini. Received Janary 4, 1901.

5780. LIBOCEDRUS CHILENSIS.

From La Plata, Argentina. Presented by Dr. Carlos Spegazzini. Received January 8, 1901.

Cipres de Patagonia.

5781. ASPIDOSPERMA QUEBRACHO BLANCO. **Quebracho blanco.**

From La Plata, Argentina. Presented by Dr. Carlos Spegazzini. Received January 8, 1901.

"A very rapidly growing tree, with medicinal properties." (*Spegazzini.*)

5781a. GOMPHOCARPUS sp. **Buluba.**

From La Plata, Argentina. Presented by Dr. Carlos Spegazzini. Received December, 1900.

5782. LATHYRUS MAGELLANICUS.

From La Plata, Argentina. Presented by Dr. Carlos Spegazzini. Received January, 1901.

Mixed seeds of this and *Vicia macraei.*

5783. PROSOPIS DENUDANS.

From La Plata, Argentina. Presented by Dr. Carlos Spegazzini. Received January 5, 1901.

Algarroba orozii?

5784. BERBERIS DULCIS.

From La Plata, Argentina. Presented by Dr. Carlos Spegazzini. Received January 5, 1901.

Calafata parra. From Chubut.

5785. PHYSALIS FRANCHETI (?).

From Tokyo, Japan. Presented by Mr. T. Watase, of Tokyo Plant and Seed Co.

A variety with very large fine fruits.

5786. GOMPHOCARPUS sp. **Buluba.**

From the Soudan, Africa. Presented by Doctor Trabut, Government Botanist of Algeria, through Mr. Lyster H. Dewey, Assistant Botanist, U. S. Department of Agriculture.

"I have cultivated this species of gomphocarpus for several years under the name 'Buluba.' It attains a large growth, and yields a beautiful fiber closely resembling silk." (*Trabut.*)

5787. HUMULUS LUPULUS. **Hop.**

From Bohemia, Austria-Hungary. Received through Mr. D. G. Fairchild (No. 483), January, 1901.

Semsch. "Cuttings of this noted hop, from the neighborhood of the most famous locality of the Platte, where it is known to yield almost as fine hops as the best Saaz variety and in much larger quantity. It is this variety which the growers of the Saaz variety have imported in large quantities into Saaz to replace the old Bohemian variety, which has so fallen off in yield that its culture no longer pays, unless a fancy price can be secured. These hops possess an aroma that is really fine. Professor Chodounsky, of the Experiment Station for Brewing Industries in Prague, one of the best-known and most careful judges of hop varieties, says of this Semsch hop:

"'This red hop, which gives a much larger yield than the old Bohemian red hop (Saaz variety), is to be reckoned among the very good hops. It has an oval form, a well-shaped spindle, and an agreeable aroma. It is considered as an intermediate type approaching the Rakonitz-Saaz hop, standing next to it as regards worth. This is probably the best yielder of all the really fine European varieties.'

"As these cuttings have been secured with great difficulty, and as it will be more and more difficult to obtain others, they should be given especial attention. In order to propagate them as rapidly as possible, the young shoots should be layered next spring and cut into lengths when rooted. These cuttings have been taken from one of the best hop gardens in the Platte region in Bohemia, but being cut during the winter they are not as thrifty as if taken in the spring. The rule in Bohemia is to place a single cutting in a hill, but if small and weak it might be better to put two together.

"These hops produce the finest aroma when planted on yellow clay soils. The vines are light yellow when grown in sandy or clayey soil, but darker when grown where the soil has more humus, or is of a peaty or swampy character—what the Germans call '*moor Erde.*'" (*Fairchild.*)

5788 to 5792. HORDEUM DISTICHUM. **Barley.**

From Munich, Bavaria. Received through Mr. D. G. Fairchild (No. 467), January 16, 1901.

A collection of prize-winning barleys from the Barley and Hop Exposition, 1900. Forwarded by Hon. James H. Worman, U. S. Consul at Munich, as follows:

5788. (467b.)
5789. (467d.)
5790. (467e.)
5791. (467f.)
5792. (467g.)

5793. HORDEUM DISTICHUM NUTANS. **Barley.**

From Kwassitz, Moravia, Austria. Received through Mr. D. G. Fairchild (No. 481), January 16, 1901.

Moravian or *Hanna.* "The noted *Hanna* brewing barley from the breeder or selecter, Emanuel Ritter von Proskowetz, of Kwassitz. This is unquestionably one of the best brewing barleys in the world and is noted for its qualities of early ripening, unusual heavy yields, and special mealiness, which latter, together with other qualities of kernel, renders it one of the great favorites among German as well as Austrian brewers. Notwithstanding a duty in Bavaria of 22 marks per German ton on brewing barleys and an increased cost of transportation, the best Bavarian breweries import this *Hanna* barley. In the Thirty-ninth Session of the Bavarian House of Deputies (1899) the purchase of these *Hanna* barleys among other foreign sorts by the famous Hofbrauhaus was made the reason of an attack upon the director of this State institution and, although the claim was not sustained that the *Hanna* barley is superior to the *best* Bavarian, the inference which is drawn is that on the average it is more satisfactory and economical from the brewer's standpoint. The former director of the Brauhaus Staubwasser claimed in his defense that the *Hanna* barley, especially that grown in Hungary, was ready for malting earlier than Bavarian varieties, which speaks for the earliness of the variety claimed by the producer. Von Proskowetz claims for the variety a *pedigree* and says that it was selected as a single plant from some barley which he knew to be of very old Moravian origin. Through careful selection he has been able to bring its productivity up to 3,700 kilos per hectare and *shorten its period of growth by over a week.* It is a light straw producer *suited especially to light or sandy loams.* Owing to its early ripening quality it is especially valuable in Hungary, where the hot season occurs the latter part of July, but after the *Hanna* barley has so far matured as to be little influenced by it. Sow in March, or earlier if possible, providing soil is in proper condition. On light soil drill in rows 5 inches apart, on heavier soils 6 to 7 inches. If it can be made to follow a beet root or potato crop so much the better. Owing to its heavy yielding capacity, earliness, and high grade as a brewing grain, this variety is driving out all other sorts in Austria and every year large quantities of seed grain are imported into Hungary. So far as I can ascertain this is the first importation of this variety ever made into America." (*Fairchild.*)

5794. HORDEUM DISTICHUM. **Barley.**

From Leneschitz, Bohemia. Received from Prof. Frantisek Hess, of the Laun Ag. School, through Mr. D. G. Fairchild (No. 472, November 15, 1900), January 16, 1901.

An excellent brewing barley, probably not a pure stock. A part of the same lot which took the first prize in the Austrian section of the Paris Exposition. From the estate of Josef Pisoft.

5795. PHASEOLUS VULGARIS. **Adler bean.**

From Sachsenfeld, Styria, Austria. Received through Mr. D. G. Fairchild (No. 484, December 21, 1900), January 16, 1901.

Adler. A sample. "One of the finest varieties known in Austria. It is indigenous to Styria, where it is considered by connoisseurs an exceptionally fine table bean. I have eaten it and found it unusually good, though the skin is somewhat tough. It is, however, worth a trial by experiment stations." (*Fairchild.*)

5796. PAPAVER SOMNIFERUM. **Poppy.**

From Sachsenfeld, Styria, Austria. Received through Mr. D. G. Fairchild (No. 485, December 20, 1900), January 16, 1901.

A large-podded variety of poppy, grown in Styria exclusively for the production of oil. The pods are collected in autumn, dried, their tops cut off, and the seed shaken out. The seed is then ground and an oil is pressed out of it. This oil is extensively used in cooking and as a table oil. It is said not to grow rancid, and is very highly esteemed by the Styrians. The pods are often 2 inches in diameter." (*Fairchild.*)

5797. COFFEA ARABICA. **Coffee.**

From Macassar, Celebes. Presented by Mr. Karl Auer, U. S. consular agent, Macassar, through Messrs. Lathrop and Fairchild (No. 485*a*, February 11, 1900), January 22, 1901.

Patjoe or *Bonthain* coffee. "A superior local variety from south Celebes, which was formerly exported in large quantities to Europe." (*Fairchild.*)

5798. BROMELIA sp. **Timbiriche.**

From Celaya, Mexico. Presented by Prof. Felix Foëx. Received January 22, 1901.

"Like the Jarilla (No. 5753), it is a fruit to be drunk, not eaten. It is ground or crushed in water. The Mexicans prefer this as a refreshing drink to lemonade made from lemons. It is especially valuable for improving hard water, i. e., calcareous or magnesian waters, because the acid in the fruit precipitates these salts. The fruit does not grow in this vicinity, but in an arid region higher up. The plant is said to resemble the Yucca, but I have not seen it. The fruits sell in the markets here at 1 cent each, while other fruits have no value because of their abundance." (*Foëx.*)

5799. TRITICUM POLONICUM. **Polish wheat.**

From France. Received January 23, 1901.

Polish or *Astrakhan.*

5800. TRITICUM DURUM. **Wheat.**

From Paris, France. Received January 23, 1901.

Belotourka.

5801. LAVANDULA VERA. **Lavender.**

From Paris, France. Received January 23, 1901.

5802. LAVANDULA SPICA. **Spike lavender.**

From Paris, France. Received January 23, 1901.

5803. SESAMUM INDICUM. **Sesame.**

From Paris, France. Received January 23, 1901.

White seeded.

5804. SESAMUM INDICUM. **Sesame.**

From Paris, France. Received January 23, 1901.

Yellow seeded.

5805 to 5809. ANDROPOGON SORGHUM. **Sorghum.**

From Medicine Lodge, Kans. Received February, 1901. Seed of the following varieties:

5805.

Amber.

5806.

Collier.

5807.

Colman.

5808.

Kansas orange.

5809.

Minnesota early amber.

5810 to 5823. PYRUS MALUS. **Apple.**

From Stockholm, Sweden. Presented by Director Axel Pihl, of the Swedish Horticultural Society, Rosendal, through Messrs. Lathrop and Fairchild (Nos. 400–413, July 18, 1900). Received February 4, 1901.

5810.

Astrachan sparreholms (Svensk Pomologi Applen, p. 73). "Originated in 1859. Ripens late in September; not commonly cultivated even in Sweden; as good as any ripening at this time; believed to be a hybrid between White Astrakhan and Rosenhäger." (*Fairchild.*)

5811.

Bjorkvicks (Svensk Pomologi, p. 93). "A fall apple; well known; first described in 1862; original tree in middle Sweden, at Bjorkvicks." (*Fairchild.*)

5812.

Fagerö (Svensk Pomologi, p. 91). "A new sort worthy of trial. Not well known, even in Sweden." (*Fairchild.*)

5813.

Frösåkers. "A fall apple, little known, even in Sweden. Director Pihl says it is a good sort; has been introduced into Finland within the last ten years, and is cultivated there with great success." (*Fairchild.*)

5814.

Gimmersta. "Of unknown origin. Little known, even in Sweden. An excellent early (September) table apple; very hardy; a first-rate market apple." (*Fairchild.*)

5815.

Hampus. "A summer apple of the very first quality; rather small; trees hardy, but of slow growth; probably of Swedish origin; very commonly grown; one of the best known and most extensively grown sorts." (*Fairchild.*)

5816.

Oranie. "A well-known summer or early autumn sort, in color not very attractive, but in flavor next to "Humus," the best in Sweden; very heavy and early bearer; hardy; largely cultivated in Sweden. Director Pihl recommends it heartily for trial." (*Fairchild.*)

5817.

Svensk vinterpostof. "One of the oldest and commonest sorts; late autumn and early winter variety of medium quality; most used as a table apple, but is suitable for kitchen use; does not keep late into winter." (*Fairchild.*)

5810 to 5823—Continued.

5818.

Ringstads. "A showy red-cheeked table apple of excellent quality; a good market sort; largely planted in Sweden and Finland; quite hardy. Highly recommended by Director Pihl." (*Fairchild.*)

5819.

Stenkyrke. "One of the very best Swedish sorts. Excellent keeper. A very good table apple. Originated on the chalky soil of Gottland. It does well on clay soil and is heartily recommended by Director Pihl." (*Fairchild.*)

5820.

Stäringe. "Late summer or early autumn variety. Ripens in September. A table apple of very fine quality. Origin unknown. Ranks very high, though it is not very commonly cultivated." (*Fairchild.*)

5821.

Säfstaholms. "Ripens in September. A most popular sort and one Director Pihl thinks would be very highly prized in America. A table sort made known by the well-known Swedish pomologist, Olof Eneroth. Quite hardy." (*Fairchild.*)

5822.

Åkerö. "This variety is considered, at the present time, to be the best of all the Swedish apples. The tree is one of the hardiest and of uncommonly strong growth. Not liable to disease. A winter table apple of excellent quality. Keeps until spring. A heavy bearer only at advanced age. Grows well in any kind of soil. The original tree is standing at Åkerö, although planted more than one hundred years ago. Much propagated in last twenty-five years." (*Fairchild.*)

5823.

Olands Kungs. "Closely related to *Scharlakansparmän*, but is not the same. A small, very bright red table apple. Sold in very large quantities as a Christmas-tree apple, for which it is especially suited, as it keeps well until Christmas. Hardy and tolerably productive." (*Fairchild.*)

5824. PRUNUS DOMESTICA. **Plum.**

From Stockholm, Sweden. Presented by Director Axel Pihl through Messrs. Lathrop and Fairchild (No. 414, July 18, 1900). Received February 4, 1901.

Allmänna gul. "A very good cooking plum. Extremely hardy, but not a very heavy bearer. Almost always propagated by root division. Grown as far north as any plum." (*Fairchild.*)

5825. CERATONIA SILIQUA. **Carob.**

From Lissa Island, Dalmatia. Received through Mr. D. G. Fairchild (No. 499, January 7, 1901), February 5, 1901.

"Bud sticks of a variety with large sweet pods." (*Fairchild.*)

5826. LATHYRUS PLATYPHYLLUS.

From Stockholm, Sweden. Presented by Prof. V. Wittrock, director of the botanic gardens, Frescati, through Messrs. Lathrop and Fairchild (No. 441, August 11, 1900). Received February 5, 1901.

"A species of Lathyrus named by Retzius *L. platyphyllus.* Its origin is uncertain. In Professor Wittrock's garden, at Frescati, are plants which have been growing for twelve years. One of these is planted against a wall 12 feet or more high, and the plant has spread over a large surface and overtops the wall by several feet. The vigor of this plant is remarkable and the amount of fodder produced apparently great. So far no experiments with the plant have been made in the field. As it is a perennial and makes a comparatively little growth in the first three years, such experiments as have been started do not as yet show results. A few seeds only are obtainable here, as the plant seldom ripens its seeds in this latitude. Director Wittrock thinks it is quite possible that this plant is a different variety from that described by Retzius. So far as I am aware it is quite unknown as a fodder plant outside of southern Sweden, where Professor Wittrock has sent seeds. It deserves careful attention." (*Fairchild.*)

5827. BROMUS INERMIS. **Smooth brome-grass.**

From Stockholm, Sweden. Presented by Prof. V. Wittrock through Messrs. Lathrop and Fairchild (No. 442, August 10, 1900). Received February 5, 1901.

5828. CEPHALARIA TATARICA.

From Stockholm, Sweden. Presented by Prof. V. Wittrock through Messrs. Lathrop and Fairchild (No. 443, August 10, 1900). Received February 5, 1901.

"A new fodder plant of exceptionally vigorous growth. Professor Wittrock thinks it is worthy of extensive trial." (*Fairchild.*)

5829. HEDYSARUM OBSCURUM.

From Stockholm, Sweden. Presented by Prof. V. Wittrock through Messrs. Lathrop and Fairchild (No. 445, August 10, 1900). Received February 5, 1901.

"A high Alpine fodder plant which occurs above the timber line and is especially suited to mountain climates, although growing well in deep soil in the valleys or on the plains. The root system is very long; grows readily from seed if latter has been passed through a 'preparator' or rubbed with sandpaper. Otherwise it will take one to three years to germinate. Has been grown here twelve years on same spot. Yield is good. Highly ornamental. Professor Wittrock says it is the best Alpine fodder plant he knows." (*Fairchild.*)

5830. CALAMAGROSTIS PHRAGMITOIDES.

From Stockholm, Sweden. Presented by Prof. V. Wittrock through Messrs. Lathrop and Fairchild (No. 446, August 11, 1900). Received February 5, 1901.

"An excellent fodder grass for moist localities. It very seldom seeds, but spreads rapidly when once planted. Yields a heavy, nutritious fodder." (*Fairchild.*)

5831. AMMOPHILA ARENARIA. **Beach-grass.**

From Stockholm, Sweden. Presented by Prof. V. Wittrock through Messrs. Lathrop and Fairchild (No. 447, August 11, 1900). Received February 5, 1901.

"An excellent fodder grass for moist localities in high latitudes. The plant has a wandering habit. It dies out in one place after a few years, but spreads from a center in all directions. It yields a large quantity of valuable fodder, according to Professor Wittrock." (*Fairchild.*)

5832. GLYCERIA SPECTABLIS.

From Stockholm, Sweden. Presented by Prof. V. Wittrock through Messrs. Lathrop and Fairchild (No. 448, August 11, 1900). Received February 5, 1901.

"A forage plant grown extensively in some parts of Sweden. Adapted to moist places. Baron von Pijkull Volloesäby, of Knifsta, Sweden, has large cultures of this plant and can supply rhizomes in quantity for trial if desired." (*Fairchild.*)

5833. VERBASCUM SPECIOSUM.

From Stockholm, Sweden. Presented by Prof. V. Wittrock through Messrs. Lathrop and Fairchild (No. 449, August 11, 1900). Received February 5, 1901.

"An East European or West Asiatic biennial that has just been determined by Professor Wittrock. It is quite new, and one of the most gorgeous yellow decorative plants I have ever seen. The immense flower spikes, of which there are many branches, remain covered with blossoms for more than a month. Caution should be taken with it as, like others of the same genus, it may prove a weed. Professor Wittrock says it is very easily rooted out and will probably never be a bad weed." (*Fairchild.*)

5834. TRIFOLIUM PANNONICUM.

From Stockholm, Sweden. Presented by Prof. V. Wittrock. Received February 5, 1901.

5835. FESTUCA ARUNDINACEA.

From Stockholm, Sweden. Presented by Dr. V. Wittrock. Received February 3, 1901.

5836. HUMULUS LUPULUS. **Hop.**

From Polepp, Bohemia. Received through Mr. D. G. Fairchild (No. 470a), 1901.

Red Semsch. Same as No. 5758.

5837. COCHLEARIA ARMORACEA. **Horse-radish.**

From Polepp, Bohemia. Received through Mr. D. G. Fairchild, January, 1901.

5838. ELEUSINE CORACANA. **Ragi millet.**

From Rhodesia, South Africa. Presented by Dr. Wm. L. Thompson, of Oberlin, Ohio.

Upoka or *Ngoza.* "This is the most important food plant of the natives of Rhodesia and its yield of seed is said to be something phenomenal." (*Fairchild.*)

5839. CUCUMIS SATIVUS. **Cucumber.**

From Znaim, Austria. Received through Mr. D. G. Fairchild (No. 480), January 10, 1901.

Znaim. "A variety largely grown for salting and pickling. Said by Mr. W. W. Tracy, sr., to be a mixture of strains probably deriving its name merely from the noted locality where cucumber growing is largely practiced." (*Fairchild.*)

5840. ACTINIDIA.

From Ichang, China. Received through Mr. G. D. Brill (No. 1), December, 1900.

"Large fruited. Chinese name *Yang Tao.*" (*Brill.*)

5841. ASTRAGALUS CICER.

From Stockholm, Sweden. Presented by Dr. V. Wittrock through Messrs. Lathrop and Fairchild (No. 444, August 10, 1900). Received February 6, 1901.

"Considered by Doctor Wittrock to be a very important forage plant. It spreads with great rapidity and should be watched as it may become a weed. Suited to both sandy and clay soils. A true Steppe plant. Better for prairies than for cultivated lands." (*Fairchild.*)

5842. HORDEUM DISTICHUM. **Barley.**

From Binsbach, Bavaria. Received from Mr. D. G. Fairchild, through the kindness of Hon. James H. Worman, United States Consul at Munich, 1901.

Chevalier.

5843. HORDEUM VULGARE. **Barley.**

From Binsbach, Bavaria. Received from Mr. D. G. Fairchild, through the kindness of Hon. James H. Worman, United States Consul at Munich, 1901.

Webs.

5844. HORDEUM VULGARE. **Barley.**

From Binsbach, Bavaria. Received from Mr. D. G. Fairchild, through the kindness of Hon. James H. Worman. United States Consul at Munich, 1901.

Franken.

5845. HORDEUM DISTICHUM. **Barley.**

From Thalham, Bavaria. Received from Mr. D. G. Fairchild, through the kindness of Hon. James H. Worman, United States Consul at Munich, 1901.

Bohemian.

5846. HORDEUM DISTICHUM var. NUTANS. **Barley.**

From Binsbach, near Gonheim, Bavaria. Received through Mr. D. G. Fairchild (No. 478), February, 1901.

"This barley was awarded the gold medal as the best of 680 exhibits of brewing barley at the Bavarian Barley and Hop Exposition, held at Munich, September 29 to October 3, 1900." (*Fairchild.*)

5847 to 5899. HORDEUM DISTICHUM. **Barley.**

From Paris. Received through Mr. D. G. Fairchild, February, 1901. Samples of barley obtained at the exposition, as follows:

5847.

Kitzinger.

5848.

Pilsen.

5849.

Laniger. (No. 573.)

5850.

Kwassitzer.

5851.

Landgerste. (No. 442.)

5852.

Scottish pearl. (No. 159.)

5853.

Chevalier. (No. 47.)

5854.

Fünfstettener. (No. 551.)

5855.

Fünfstettener. (No. 63.)

5856.

Saal or *Kaiser.* (No. 167.)

5857.

Frankish. (No. 608.)

5858.

Common two-rowed. (No. 238.)

5859.

(No. 479.)

5860.

(No. 108.)

5861.

Lower Bavarian. (No. 476.)

5862.

Hanna. (No. 149.)

5863.

Melon. (No. 325.)

5864.

Imperial. (No. 48.)

5865.

Chevalier. (No. 64.)

5866.

Chevalier. (No. 198.)

5867.

Bohemian. (No. 135.)

5868.

Bohemian. (No. 454.)

5869.

Goldthorpe. (No. 1.)

5870.

Frankish. (No. 356.)

5847 to 5899—Continued.

5871.

Frankish. (No. 300.)

5872.

Lower Bavarian. (No. 417.)

5873.

Mittelgerste Thürengen. (No. 599.)

5874.

Christensen's Goldthorpe. (No. 43.)

5875.

Juwel. (No. 324.)

5876.

Bavarian. (No. 567.)

5877.

Hanna. (No. 79.)

5878.

Laninger. (No. 670.)

5879.

(No. 683.)

5880.

Frankish. (No. 220.)

5881.

Hanna. (No. 152.)

5882.

Webbs. (No. 191.)

5883.

Lower Bavarian. (No. 107.)

5884.

Tauber. (No. 310.)

5885.

(No. 3.)

5886.

Bohemian. (A).

5887.

Poppenheim.

5888.

(Probably not a pure variety.)

5889.

(No. 2.)

5890.

Poppenheim.

5891.

Hanna.

5892.

Kitzingen.

5893. (Number not used.)

5894.

Hanna.

5895.

Bohemian.

5896.

Bohemian.

5897.

I Schwarzenberg.

5898.

II Schwarzenberg.

5899.

III Schwarzenberg.

5900. CUCUMIS SATIVUS. **Cucumber.**

From Auburn, N. Y. Received through Mr. G. W. Boynton, February 6, 1901. *Aksel dwarf,* grown from No. 8, Inventory No. 1.

5901. RAPHANUS SATIVUS. **Radish.**

From Amite City, La. Received through Mr. W. O. Posey, February 6, 1901. Seed grown from No. 1189, Inventory No. 2.

5902. CAPSICUM ANNUUM. **Sweet pepper.**

From Anna Maria Key, Fla. Received through Mr. W. C. Berg, February 9, 1901. Seed grown from No. 3976, Inventory No. 8.

5903. HORDEUM DISTICHUM. **Barley.**

From Saaz, Bohemia. Received through Mr. D. G. Fairchild (No. 477, Nov. 20, 1900), February 9, 1901.

"Bohemian brewing barley from the estates of Prince Schwarzenberg, at Jinovic, near Saaz. From sandy loam, soil rich in lime. Much exported to Norway. This is an excellent representative Bohemian barley, though probably not a pure variety." (*Fairchild.*)

5904. CUCUMIS MELO. **Muskmelon.**

From Elgin, Utah. Received through Mr. J. F. Brown, February 9, 1901.

Khiva. Seed grown from No. 114, Inventory No. 1.

5905. SECALE CEREALE. **Rye.**

From Tenmile, W. Va. Received through Mr. F. Spiker, February 12, 1901.

Winter Ivanof, grown from No. 1342, Inventory No. 2.

5906. CUCURBITA MAXIMA. **Honey pumpkin.**

From Eden, Nebr. Received through Mr. D. J. Wood, February 14, 1901.

Seed grown from No. 14, Inventory No. 1.

5907. CHAETOCHLOA ITALICA. **Millet.**

From Brookings, S. Dak. Received through Prof. D. A. Saunders, February 15, 1901.

Seed grown from No. 2798, Inventory No. 7.

5908. CUCUMIS MELO. **Muskmelon.**

From Waterloo, Kans. Received through Mr. J. W. Riggs, February 14, 1901.

Maroussia Lessevitsky, grown from No. 27, Inventory No. 1.

5909 to 5918. VITIS VINIFERA. **Grape.**

From Lesina Island, Dalmatia. Received through Mr. D. G. Fairchild (Nos. 486–495), February 20, 1901. A collection of grape cuttings of the following varieties:

5909.

Boglich. "A dark-colored sweet table grape having a thick skin. The bunches are said to grow to a very large size, sometimes weighing as much as fourteen pounds. Suitable for limestone soils." (No. 486.) (*Fairchild.*)

5910.

Marascina. "A small light-brown translucent grape, of unusual sweetness. It is a shy bearer and subject to Peronospora. Originated near Sebenico on mainland. A high-grade dessert wine, known as *Marascina,* is made from this grape. This wine somewhat resembles Marsala, but is considered by some as superior, and sells for a much higher price than any of the other wines of this region." (No. 487.) (*Fairchild.*)

5911.

Stronzo di Gallo. "One of the three best grapes grown on this island. It is a thin-skinned white grape of a peculiar long shape and contains but one seed. It will keep until January. Suitable for poor limestone soils." (No. 488.) (*Fairchild.*)

5909 to 5918—Continued.

5912.

Kurtelaska. "A white wine grape, native of the island, producing medium-sized crowded clusters. A wine known as 'Apollo,' highly prized in Germany and Austria, is made by extracting the juice from the fresh grapes and fermenting it, separated from the skins. Suitable for limestone soils." (No. 489.) (*Fairchild.*)

5913.

Dernekusa. "The black grape from which the common wine of Lesina is made. It is a thin-skinned grape of medium size, and is said to be a fair table grape. It is a heavy producer." (No. 490.) (*Fairchild.*)

5914.

Ugava. "A white grape serving for the production of a bottled wine exported from Lesina. Only a few plantations of this variety exist on the island because the plants require a *rich* soil. The wine is sold for 1.20 to 1.30 florins a liter, which is high, considering that ordinary wines bring from .25 to .50 florin a liter." (No. 491.) (*Fairchild.*)

5915.

Banjoska. "A variety of wine grape brought to the island from a neighboring small island, called 'San Clementi,' according to accounts given me. It makes a strong wine, which is imported especially into Hungary. Berries small. Heavy bearer. Suitable for dry, strong, calcareous situations." (No. 492.) (*Fairchild.*)

5916.

Palarusa. "A white wine variety from which much of the Lesina wine is produced. One hundred kilos of grapes yield, it is said, 90 kilos of wine. Not particular as to soil." (No. 493.) (*Fairchild.*)

5917.

Puiska. "A thick-skinned, firm-fleshed white grape, originally from Apulia, Italy, but grown here many years. Said to be a very heavy bearer." (No. 494.) (*Fairchild.*)

5918.

Trojka. "A very large table grape of excellent flavor. It is a heavy bearer and keeps well. It is a native of Lesina and requires a rich soil." (No. 495.) (*Fairchild.*)

5919. FICUS CARICA. **Fig.**

From Lesina Island, Dalmatia. Received through Mr. D. G. Fairchild (No. 496, Jan. 7, 1901), February 20, 1901.

San Pietro. "The figs of the small island of Lesina, which lies off the Dalmatian coast, are noted in Triest as the most delicate of any which come to that port, except the high-priced Smyrna sorts. They have not the size or the flavor of the Smyrnas, but, considering the fact that they do not require fertilization with the caprifig insect, they are certainly worthy of a trial in the California fig plantations. This variety is a very early one, ripening here in June. It is also reported to be exceptionally large." (*Fairchild.*)

5920. FICUS CARICA. **Fig.**

From Lesina Island, Dalmatia. Received through Mr. D. G. Fairchild (No. 497, January 7, 1901), February 20, 1901.

Zarniza. "Cuttings of one of the ordinary figs grown on this island. Dark in color, produces crops twice a year. It is sometimes dried and packed in small barrels and exported." (*Fairchild.*)

5921. FICUS CARICA. **Fig.**

From Lesina Island, Dalmatia. Received through Mr. D. G. Fairchild (No. 498, January 7, 1901), February 20, 1901.

Zamožujič'a. "A good fig with unusually tender skin, far superior to the dried Italian or Greek figs. Many maintain that as far as tenderness of skin is concerned it is really superior to the Smyrna figs. It is not fertilized by the caprifig insect and may prove a superior sort if once fertilized seed are produced. Worthy of trial. This fig is shipped in large quantities to Triest." (*Fairchild.*)

5922. AMYGDALUS PERSICA. **Peach.**

From Lesina Island, Dalmatia. Received through Mr. D. G. Fairchild (No. 500, January 8, 1900), February 20, 1901.

Giallo. "Cuttings of one of the best peaches of Dalmatia, and, although a clingstone, is worth trying in any variety test. Suitable for stony hillsides of a calcareous nature." (*Fairchild.*)

5923. AMYGDALUS PERSICA. **Peach.**

From Lesina Island, Dalmatia. Received through Mr. D. G. Fairchild (No. 501, January 8, 1900), February 20, 1901.

Bianca. "Cuttings of a white-fleshed freestone peach of excellent quality, maturing in August. Suitable for stony hillsides of a calcareous nature." (*Fairchild.*)

5924. PYRUS COMMUNIS. **Pear.**

From Lesina Island, Dalmatia. Received through Mr. D. G. Fairchild (No. 502, January 8, 1901), February 20, 1901.

Nyoko. "Cuttings of a variety of pear said to be of superior quality. Somewhat similar to the Bartlett. Suitable for calcareous hillsides in warm climates like Arizona and southern California." (*Fairchild.*)

5925. BRASSICA OLERACEA. **Cabbage.**

From Osage, Iowa. Received through Mr. George Phillips, February 12, 1901.

Earliest white, grown from No. 6. Inventory No. 1.

5926. BRASSICA OLERACEA. **Cabbage.**

From Osage, Iowa. Received through Mr. George Phillips, February 13, 1901.

White Reval, grown from No. 4. Inventory No. 1.

5927. PHASEOLUS VULGARIS. **Bean.**

From Waynesville, N. C. Received through Dr. G. D. Green, February 13, 1901.

Flageolet, grown from No. 2069. Inventory No. 5.

5928. CICER ARIETINUM. **Garbanzo.**

From Tenino, Wash. Received through Mr. J. F. Cannon, February 25, 1901. Seed grown from No. 2376. Inventory No. 5.

5929. PHASEOLUS VULGARIS. **Bean.**

From Judsonia, Ark. Received through Mr. Jacob C. Bauer, February 23, 1901.

Soissons, grown from No. 2068. Inventory No. 5.

5930. ANDROPOGON SORGHUM. **Sorghum.**

From Scottsville, Ky. Received through Mr. Rupert Huntsman, February, 1901.

Colman, grown from No. 4308. Inventory No. 8.

5931. PRUNUS DOMESTICA. **Plum.**

From Saaz, Bohemia. Presented by Doctor Wolfram through Mr. D. G. Fairchild (No. 476, November 18, 1900). Received February 26, 1901.

Dolan. "Cuttings of a plum originated in the village of Dolan, near Saaz, and said by Doctor Wolfram, one of the best Bohemian horticulturists, to be of superior quality. The dried prunes made from this sort are said to be little, if any, inferior to the famous Bosnian prunes. They are large and sweet, and have a flat stone that separates very easily from the flesh." (*Fairchild.*)

5932. SORBUS EDULIS. **Sorb apple.**

From Saaz, Bohemia. Presented by Doctor Wolfram through Mr. D. G. Fairchild (No. 474, November 18, 1900). Received February 26, 1901.

"Cuttings of a variety of Sorb apple discovered several years ago in the forests of Moravia, and since distributed by the Austrian Government through its agricultural schools. The fruit is small, about the size of *Vaccinium vitis-idæa*, and, when cooked, the 'compot' closely resembles that made from this cranberry." (*Fairchild.*)

5933. PYRUS MALUS. **Apple.**

From Saaz, Bohemia. Received through Doctor Wolfram, February 26, 1901.

Calville Madame Lesans. "Similar to *Calville blanc*, but more resistant to fungous attacks." (*Wolfram.*)

5934. FAGOPYRUM ESCULENTUM. **Buckwheat.**

From Berlin, Conn. Received through Mr Earl Cooley, February 26, 1901.

Orenburg, grown from No. 2801. Inventory No. 7.

5935. ASTRAGALUS SINICUS. **Genge clover.**

From Yokohama, Japan. Received through Suzuki and Iida, March 2, 1901.

5936. LUPINUS PILOSUS CAERULEUS. **Lupine.**

From Paris, France. Received through Vilmorin-Andrieux & Co., February, 1901.

5937. LUPINUS PILOSUS ROSEUS. **Lupine.**

From Paris, France. Received through Vilmorin-Andrieux & Co., February, 1901.

5938. AVENA SATIVA. **Oat.**

From Proskurow, Russia. Received through Dr. S. de Mrozinski, March 6, 1901.

Sixty-day. Originated by Doctor Mrozinski.

5939. GOSSYPIUM BARBADENSE. **Egyptian cotton.**

From Mansourah, Egypt. Received through Mr. Alfred Dale, March 6, 1901.

Jannovitch.

5940. ORYZA SATIVA. **Rice.**

From Mansourah, Egypt. Received through Mr. Alfred Dale, March 6, 1901.

Fino.

5941. ORYZA SATIVA. **Rice.**

From Mansourah, Egypt. Received through Mr. Alfred Dale, March 6, 1901.

Eyne-il-Bint.

5942. LOTUS ULIGINOSUS.

From Paris, France. Received through Vilmorin-Andrieux & Co., March 9, 1901.

5943. PINUS SYLVESTRIS. **Scottish pine.**

From Paris, France. Received through Vilmorin-Andrieux & Co., March 9, 1901.

5944. PINUS SYLVESTRIS. **Scottish pine.**

From Paris, France. Received through Vilmorin-Andrieux & Co., March 9, 1901.

Var. *Rigensis.*

5945. PICEA EXCELSA. **Norway spruce.**

From Paris, France. Received through Vilmorin-Andrieux & Co., March 9, 1901.

5946 to 5957. LINUM USITATISSIMUM. **Flax.**

From Paris, France. Received through Vilmorin-Andrieux & Co., March 9, 1901. A collection of seed of different varieties, as follows:

5946.

Common flax.

5947.

True imported *Riga.*

5948.

French-grown *Riga.*

5949.

White-flowering.

5950.

Yellow-seeded.

5951.

Pskoff.

5952.

Improved Russian imported *Pskoff.*

5953.

Winter.

5954.

Of Belgian origin.

5955.

Of Dutch origin.

5956.

Nostrana of Lombardy.

5957.

Catanian or Sicilian.

5958. CICHORIUM INTYBUS. **Chicory.**

From Görz, Austria. Received through Mr. D. G. Fairchild (No. 515, January 24, 1901), March 11, 1901.

"A white variety of this excellent winter salad plant, which is one of the specialties of Görz." (*Fairchild.*)

5959. BRASSICA OLERACEA. **Cabbage.**

From Görz, Austria. Received through Mr. D. G. Fairchild (No. 516, January 24, 1901), March 11, 1901.

"A variety of cabbage which is noted for its remarkable winter-keeping qualities. Recommended by Director Bolley, of the Görz Experiment Station, for trial in the Southern States." (*Fairchild.*)

5960. BRASSICA OLERACEA. **Cabbage.**

From Bocche di Cattaro, Dalmatia. Received through Mr. D. G. Fairchild (No. 520, February 2, 1901), March 11, 1901.

"Seed of a perennial cabbage known as *Capuzzo,* which forms the principal food of many hundreds of families in Dalmatia. Grown especially in the regions about Cattaro and Ragusa. It grows to a height of 5 feet and bears in this warm climate tender leaves throughout the winter. These are picked off singly, or the whole, rather irregular, small head is cut off. The stems sprout out again and furnish, in a few months, a second crop of edible leaves. They require little culture and are allowed to stand in the fields for three or four years. Other crops are cultivated between the rows of *Capuzzo.* The method of planting is precisely similar to that for cabbages. From the ease with which it is grown and its apparent favor among the common people this plant is worthy a trial in the Southern States." (*Fairchild.*)

5961 to 5963. NICOTIANA TABACUM. **Tobacco.**

From Corfu, Greece. Presented by the director of the Corfu Agricultural Experiment Station through Mr. D. G. Fairchild (Nos. 523–525, February 9, 1901). Received March 11, 1901.

"Seeds of the Turkish tobaccos from which the noted Egyptian cigarettes are made, being exported from parts of Turkey where they are grown, into Egypt where they are manufactured. Egyptian cigarettes are said to be made of blends of these three and other tobaccos." (*Fairchild.*)

5961.

Kavala, from the region in Turkey of this name. (No. 523.)

5962.

Xanthe, from the region in Turkey of this name. (No. 524.)

5963.

Trebizond, from the region in Asia Minor of this name. (No. 525.)

5964. CUPRESSUS SEMPERVIRENS. **Cypress.**

From Ragusa, Dalmatia. Received through Mr. D. G. Fairchild (No. 526, February 7, 1901), March 11, 1901.

"The cypresses of Ragusa and vicinity are very beautiful, and seem to be a distinct strain, much more symmetrical in shape than the common pyramidal kind grown in America." (*Fairchild.*)

5965. VICIA FABA. **Broad bean.**

From Corfu, Greece. Received through Mr. D. G. Fairchild (No. 527, February 9, 1901), March 11, 1901.

"Sample of a variety of broad bean originally from the island of Malta. It is a very heavy bearer and is preferred by the planters of Corfu to the native varieties." (*Fairchild.*)

5966. AVENA SATIVA. **Oats.**

From Proskurow, Russia. Received through Dr. S. de Mrozinski, March 8, 1901.

Polish. "Very fruitful and resistant to all changes of temperature. In spite of great drought, it gives comparatively good yields." (*Mrozinski.*)

5967. AVENA SATIVA. **Oats.**

From Proskurow, Russia. Received through Dr. S. de Mrozinski, March 8, 1901.

Polish. The same as No. 5966.

5968. TRIFOLIUM PRATENSE. **Red clover.**

From Proskurow, Russia. Received through Dr. S. de Mrozinski, March 8, 1901.

5969. TRIFOLIUM PRATENSE. **Red clover.**

From Proskurow, Russia. Received through Dr. S. de Mrozinski, March 8, 1901.

Same as No. 5968.

5970. KOCHIA SCOPARIA.

From Tokyo, Japan. Received through Mr. T. Watase, December 28, 1900.

5971. HUMULUS LUPULUS. **Hop.**

From Tettnang, Bavaria. Received through Mr. D. G. Fairchild (No. 482, December 10, 1900), March 12, 1901.

Tettnang late. Seed.

5972. VIOLA ODORATA. **Violet.**

From Görz, Austria. Received through Mr. D. G. Fairchild (No. 513, January 23, 1901), March 12, 1901.

Czar. "A single violet from Antonio Ferrant's houses that has been cultivated here for many years. It has a decided perfume, but is inferior to the double varieties." (*Fairchild.*)

5973. VIOLA ODORATA. **Violet.**

From Görz, Austria. Received through Mr. D. G. Fairchild (No. 512, January 23, 1901), March 12, 1901.

Conte de Brazza. "A double white violet originated in Italy and brought to Austria by Count de Brazza. It is said to be one of the best white varieties known." (*Fairchild.*)

5974. VIOLA ODORATA. **Violet.**

From Görz, Austria. Received through Mr. D. G. Fairchild (No. 511, January 23, 1901), March 12, 1901.

Parmensis. "An unusually large sweet-scented double violet, somewhat similar to the *Neapolitan.* The favorite market sort of Görz. A native of France, being found wild about Grasse." (*Fairchild.*)

5975. HORDEUM DISTICHUM. **Barley.**

From Leschkau bei Podersam, Bohemia. Presented by Wilhelm Hoffer & Son, through Mr. D. G. Fairchild. Received February, 1901.

Goldfoil.

5976. HORDEUM DISTICHUM. **Barley.**

From Kitzingen, Bavaria. Presented by Nathan Gerste & Son, through Mr. D. G. Fairchild, February, 1901.

Kitzing. "Of the best quality." (*Fairchild.*)

5977. UMBELLULARIA CALIFORNICA. **California laurel.**

From San Bernardino, Cal. Received through Mr. S. B. Parish, February, 1901.

5978. ACTINIDIA sp.

From Ichang, China. Received through Mr. G. D. Brill (No. 2), December, 1900.

Yang tao. "Bears a fruit resembling the gooseberry, about 1¼ inches long and 1 inch in diameter. Skin dull purple and quite tough. Eaten raw or cooked and also used for preserves. There are several species, to all of which the Chinese give the name *Yang tao.*" (*Brill.*)

5979. ACTINIDIA sp.

From Ichang, China. Received through Mr. G. D. Brill (No. 3), December, 1900.

Yang tao. "Fruit larger and more pointed than No. 5978. The skin is a lighter purple and thinner, and when eaten raw this has the better flavor." (*Brill.*)

5980. EUCOMMIA ULMOIDES.

From Ichang, China. Presented by Mr. E. H. Wilson, of Kew Gardens, through Mr. G. D. Brill (No. 4). Received December, 1900.

Ti Cheng. "A medium-sized tree growing wild around Ichang. It is said to be cultivated in the mountains of Hupei. The bark is used as a medicine and the glutinous seeds to adulterate silk. It is said that rubber can be extracted from the seeds. No successful experiments have, however, been made in the extraction of this supposed rubber." (*Brill.*)

5981. BENTHAMIA FRAGIFERA. **Strawberry tree.**

From Ichang, China. Received through Mr. G. D. Brill, December, 1900.

"Medium-sized tree, quite showy, fruit very palatable and used for food in some parts of China." (*Brill.*)

5982. CITRUS LIMONUM. **Lemon.**

From Bocce di Cattaro, Dalmatia. Received through Mr. D. G. Fairchild (No. 517, February 1, 1901), March 13, 1901.

Cattaro Giant. "A very large lemon, said to have originated in Mesopotamia. The trees are very vigorous and good bearers. The fruit sometimes weighs four or five pounds, and has a flesh of excellent flavor and juiciness." (*Fairchild.*)

5983. JUGLANS REGIA. **Walnut.**

From Bocce di Cattaro, Dalmatia. Received through Mr. D. G. Fairchild (No. 578, February 2, 1901), March 13, 1901.

Giant of Cattaro. "A very large English walnut of fine flavor, which brings double the price of ordinary walnuts on the Dalmatian market. Specimens, which were said to be smaller than the average, measured 2⅛ inches long by 1⅝ inches in diameter. The shell is hard and irregular. The tree grows rapidly and is a free bearer. Scions were taken from a tree on the farm of Francesco Navarin. Called to my attention by Cristoforo Spalatin of Castelnuovo." (*Fairchild.*)

5984. OLEA EUROPAEA. **Olive.**

From Bocce di Cattaro, Dalmatia. Received through Mr. D. G. Fairchild (No. 519, February 2, 1901), March 13, 1901.

Giant of Cattaro. "A very large seedling olive, specimens of which measured 1¾ inches in length by 1 inch in diameter. From two trees growing near Castelnuovo. Called to my attention by Cristoforo Spalatin." (*Fairchild.*)

5985. VITIS VINIFERA. **Grape.**

From Corfu, Greece. Received through Mr. D. G. Fairchild (No. 521, February 7, 1901), March 13, 1901.

Sultanina. "A light-yellow, transparent, seedless raisin grape. Considered to be one of the most valuable varieties, and that from which the 'Sultanina' seedless raisins of Greece are made. These raisins must not be confused with the 'Corinths,' for they are twice as large, of a light golden color, semitransparent, and much more valuable." (*Fairchild.*)

5986. CITRUS LIMONUM. **Lemon.**

From Corfu, Greece. Received through Mr. D. G. Fairchild (No. 522, February 7, 1901), March 13, 1901.

A giant-fruited variety of lemon, probably the same as No. 5982.

5987. PUNICA GRANATUM. **Pomegranate.**

From Patras, Greece. Presented by the British consul, Mr. F. B. Wood, through Mr. D. G. Fairchild (No. 548, February 16, 1901). Received March 14, 1901.

"A very large pomegranate, sometimes at least 6 inches in diameter. The fruit is red and attractive, and instead of being sweet as most sorts are, this is sour like a lemon." (*Fairchild.*)

5988. PUNICA GRANATUM. **Pomegranate.**

From Patras, Greece. Presented by the British consul, Mr. F. B. Wood, through Mr. D. G. Fairchild (No. 549, February 16, 1901). Received March 14, 1901.

"A large sweet-flavored pomegranate of excellent quality." (*Fairchild.*)

5989. CITRUS AURANTIUM. **Blood orange.**

From Patras, Greece. Presented by the British consul, Mr. F. B. Wood, through Mr. D. G. Fairchild (No. 550, February 16, 1901). Received March 14, 1901.

Patras blood. "A small, nearly seedless blood orange, the pulp being the most completely blood-red of any orange I have ever seen, the segment partitions especially so. Skin too thin for a good shipping variety, mottled dark and light, with many large oil glands. It is very juicy, of excellent, almost vinous flavor." (*Fairchild.*)

5990. CITRUS AURANTIUM. **Blood orange.**

From Corfu, Greece. Received through Mr. D. G. Fairchild (No. 528, February 10, 1901), March 14, 1901.

"A blood variety, the pulp of which is beautifully mottled with light red and the skin with a darker orange color." (*Fairchild.*)

5991. CITRUS LIMONUM. **Lemon.**

From Corfu, Greece. Received through Mr. D. G. Fairchild (No. 529, February 10, 1901), March 14, 1901.

"A variety of lemon which bears quite seedless fruits from the flowers which mature in October, and fruits full of seed from the spring flowers. The seedless fruits are called "mules" or "mulas," and differ in shape from the ordinary, being more globose and possessing a persistent pistil which often projects some distance beyond the circumference of the fruit. Often over 10 and sometimes even 20 per cent of the fruits on a tree are seedless, I am told. I am inclined to attribute the seedlessness to lack of fertilization." (*Fairchild.*)

5992. CORYLUS sp. **Hazelnut.**

From Corfu, Greece. Presented by Antonio Colla through Mr. D. G. Fairchild (No. 540, February 13, 1901). Received March 14, 1901.

"A large thin-shelled, full-meated hazelnut, growing wild in Corfu. The trees are vigorous and good bearers." (*Fairchild.*)

5993. CITRUS LIMONUM. **Lemon.**

From Corfu, Greece. Received through Mr. D. G. Fairchild (No. 530, February 10, 1901), March 14, 1901.

Similar to No. 5991.

5994. POPULUS ALBA (?) **Poplar.**

From Patras, Greece. Presented by the British consul, Mr. F. B. Wood, through Mr. D. G. Fairchild (No. 551, February 16, 1901). Received March 14, 1901.

"Cuttings from a poplar of remarkably rapid growth. The tree is 30 years old and over 3½ feet in diameter, while neighboring trees of about the same age are not more than half that size. The tree is very beautiful, of spreading habit." (*Fairchild.*)

5995. TRITICUM VULGARE. **Wheat.**

From San Giovanni a Teduccio, Italy. Received through Dammann & Co. (No. 1), March 12, 1901.

Scavurso.

5996. TRITICUM VULGARE. **Wheat.**

From San Giovanni a Teduccio, Italy. Received through Dammann & Co. (No. 2), March 12, 1901.

Iumilio.

5997. TRITICUM VULGARE. **Wheat.**

From San Giovanni a Teduccio, Italy. Received through Dammann & Co. (No. 3), March 12, 1901.

Biancolilla.

5998. BORONIA MEGASTIGMA.

From Melbourne, Australia. Presented by Carolin & Co. Received March, 1901.

"Sow in spring in seed pans in light, loamy soil. Plant out in autumn from 2 to 4 feet apart. Use no manure. The plants come into bearing the second year, and live six or seven years." (*Carolin.*)

5999. TRITICUM DURUM. **Wheat.**

From Proskurow, Russia. Presented by Dr. S. de Mrozinski. Received March 19, 1901.

Kubanka. A sample packet of this well-known variety of macaroni wheat.

6000 to 6110.

From Russia, Hungary, and Roumania. Received through Mr. M. A. Carleton, November, 1900.

A collection of seeds secured during the season from June to September, 1900.

6000. TRITICUM VULGARE. **Wheat.**

From Odessa, Russia. "A semihard red wheat; of good quality for milling, but not commonly exported. Adapted for cultivation in the middle States of the Plains." (*Carleton.*)

6001. TRITICUM VULGARE. **Wheat.**

From Odessa, Russia. *Ulta.* "A hard or semihard red spring wheat of excellent quality for milling, forming a large part of the wheat that is exported from the Kherson and Ekaterinoslav governments through Odessa." (*Carleton.*)

6002. TRITICUM VULGARE. **Wheat.**

From Odessa, Russia. *Ghirka.* "This is the principal beardless variety of red spring wheat grown in Russia, particularly in south Russia and the Volga River region. It differs from the usual varieties of Russian spring wheat in being beardless and not quite so hard grained. It forms a large part of the wheat exported from Russia." (*Carleton.*)

6003. TRITICUM VULGARE. **Wheat.**

From Berdiansk, Russia. *Berdiansk.* "A red, hard-grained, bearded winter wheat with white chaff, very similar to Crimean. It is grown in the region north of the Sea of Azov. It is an excellent variety for cultivation in the middle prairie States." (*Carleton.*)

6004. TRITICUM VULGARE. **Wheat.**

From Berdiansk, Russia. *Belokoloska.* "A red, hard-grained, beardless spring wheat with white chaff, very similar to No. 6001. Grown in the vicinity of the Sea of Azov." (*Carleton.*)

6000 to 6110—Continued.

6005. TRITICUM DURUM. **Wheat.**

From Berdiansk, Russia. *Arnautka.* "A very good sample of this variety of wheat commonly grown in the region just north of the Sea of Azov." (*Carleton.*)

6006. TRITICUM VULGARE. **Wheat.**

From Konstantinovskoe, Russia. *Ulta.* See No. 5638.

6007. TRITICUM VULGARE. **Wheat.**

From Tsaritsyn, Russia. *Torgova.* "A very hard-grained, hardy winter wheat grown in the extreme northern portion of Stavropol government, well adapted for trial in Iowa, Nebraska, and South Dakota." (*Carleton.*)

6008. TRITICUM DURUM. **Wheat.**

From Tsaritsyn, Russia. *Black Don or Chernokoloska.* "A very good variety of macaroni wheat, with black chaff, grown in the Don Territory near Poltava, Russia." (*Carleton.*)

6009. TRITICUM DURUM. **Wheat.**

From Tsaritsyn, Russia. *Kubanka.* "A very good sample of this variety of macaroni wheat commonly grown in south Russia." (*Carleton.*) See No. 5639.

6010. TRITICUM VULGARE. **Wheat.**

From Berdiansk, Russia. *Belokoloska.* The same as No. 6004.

6011. TRITICUM DURUM. **Wheat.**

From Saratov, Russia. *Egyptian.* "A very hard-grained variety of macaroni wheat somewhat similar to Kubanka, but having longer grains." (*Carleton.*)

6012. TRITICUM VULGARE. **Wheat.**

From Rostov-on-Don, Russia. *Beloglino.* "One of the hardiest red winter wheats known. Grown near Beloglinskaya, in the northern portion of the Stavropol Government, a region of great extremes of temperature and moisture. The grain is very hard and makes an excellent quality of flour. It is admirably adapted for trial in Iowa, Nebraska, and South Dakota." (*Carleton.*)

6013. TRITICUM VULGARE. **Wheat.**

From Rostov-on-Don, Russia. *Beloglino.* "Practically the same as No. 6012, but a poorer quality." (*Carleton.*)

6014. TRITICUM DURUM. **Wheat.**

From Taganrog, Russia. *Gharnovka.* "A representative sample of the best quality of this macaroni wheat, grown by the peasants in the region south of Taganrog." (*Carleton.*)

6015. TRITICUM VULGARE. **Wheat.**

From Ambrocievka, Russia. *Crimean.* "A very hard red winter wheat, similar to Nos. 5635 and 5636, but grown in the district about 20 miles north of Taganrog, in the Don Territory." (*Carleton.*)

6016. TRITICUM VULGARE. **Wheat.**

From Berdiansk, Russia. *Kerch.* "A hard red winter wheat, very similar to *Crimean*, grown near the Sea of Azov. It is very drought-resistant and well adapted for the middle prairie States. It will probably ripen a little earlier than the variety commonly called *Turkey.*" (*Carleton.*)

6017. TRITICUM VULGARE. **Wheat.**

From Kurman-Kemelechi, Russia. *Crimean.* Same as No. 5635.

6000 to 6110—Continued.

6018. Triticum durum. **Wheat.**

From Berdiansk, Russia. *Arnautka.* "A sample of this excellent macaroni wheat, grown near Taganrog." (*Carleton.*)

6019. Triticum durum. **Wheat.**

From Berdiansk, Russia. *Arnautka.* "The same variety as No. 6018, but of better quality." (*Carleton.*)

6020. Triticum durum. **Wheat.**

From Berdiansk, Russia. *Arnautka.* "Similar to Nos. 6018 and 6019, but of better quality." (*Carleton.*)

6021. Triticum vulgare. **Wheat.**

From Stavropol, Russia. "A hard red winter wheat of excellent quality, very similar to No. 5638." (*Carleton.*)

6022. Avena sativa. **Oat.**

From near Stavropol, Russia. "A large white oat having heavy straw and large, well-filled heads." (*Carleton.*)

6023. Hordeum hexastichum. **Barley.**

From near Stavropol, Russia. *Six-rowed.* "Apparently a standard variety in this region." (*Carleton.*)

6024. Panicum miliaceum. **Proso.**

From Chaplino, Russia. *White.* "One of the varieties of millet commonly grown in the Don Territory, Russia." (*Carleton.*)

6025. Panicum miliaceum. **Proso.**

From Sarepta, Russia. *White.* "A standard variety of millet grown in the lower Volga region." (*Carleton.*)

6026. Panicum miliaceum. **Proso.**

From Sarepta, Russia. *Grey.* "This variety of millet succeeds quite well in the lower Volga region, but is not so commonly grown as other kinds." (*Carleton.*)

6027. Panicum miliaceum. **Proso.**

From Sarepta, Russia. *Yellow.* "One of the standard sorts of millet grown in the lower Volga region." (*Carleton.*)

6028. Zea mays. **Corn.**

From Bukharest, Roumania. *Red Pignoletto.* "A standard variety of Italian *Pignoletto* corn commonly grown in Roumania. *Pignoletto* is a term which perhaps belongs more properly to a group of varieties than to a single variety. It includes some of the best sorts grown in Italy and to a large extent in Roumania." (*Carleton.*)

6029. Zea mays. **Corn.**

From near Taganrog, Russia. *Czekler.* "One of the best varieties of corn grown in South Russia." (*Carleton.*)

6030. Zea mays. **Corn.**

From near Taganrog, Russia. *Bessarabian.* "This is a standard variety of corn, commonly grown in Bessarabia, where a large proportion of the entire Russian corn crop is grown." (*Carleton.*)

6000 to 6110—Continued.

6031. Zea mays. **Corn.**

From near Taganrog, Russia. *Chenkvantino.* "A variety of corn grown to a considerable extent in south Russia, Roumania, Hungary, and Italy." (*Carleton.*)

6032. Zea mays. **Corn.**

From near Taganrog, Russia. *Asiatic.* "A Trans-Caucasian variety of corn considered to be one of the best for south Russia." (*Carleton.*)

6033. Zea mays. **Corn.**

From Ambrocievka, Russia. *Red Flint.*

6034. Zea mays. **Corn.**

From Saratov, Russia. "A large-grained variety of sugar corn grown in the lower Volga region." (*Carleton.*)

6035. Cannabis sativa. **Hemp.**

From Mezohegys, Hungary. "A standard variety of hemp grown in central Hungary." (*Carleton.*)

6036. Camelina sativa. **False flax.**

From Bukharest, Roumania. "A plant grown to a considerable extent in Russia and Roumania for the oil. It should be used only experimentally, as it is likely to become a bad weed. (*Carleton.*)

6037. Citrullus vulgaris. **Watermelon.**

From Berdiansk, Russia. "A rather small, round, red-fleshed melon of very good flavor." (*Carleton.*)

6038. Citrullus vulgaris. **Watermelon.**

From Berdiansk, Russia. "A red-fleshed melon of average size." (*Carleton.*)

6039. Citrullus vulgaris. **Watermelon.**

From Taganrog, Russia. "An excellent red-fleshed melon of medium size." (*Carleton.*)

6040. Citrullus vulgaris. **Watermelon.**

From Taganrog, Russia. "An excellent melon of medium size, dark-green skin, with red flesh and black seeds." (*Carleton.*)

6041. Citrullus vulgaris. **Watermelon.**

From Rostov-on-Don, Russia. "A very rich melon with red flesh and black seeds." (*Carleton.*)

6042. Citrullus vulgaris. **Watermelon.**

From Tikhoretskaya, Russia. "A medium or small round melon, very light green on the outside with darker green bands. Red flesh and very small black seeds; flavor, excellent." (*Carleton.*)

6043. Citrullus vulgaris. **Watermelon.**

From Stavropol, Russia. "A large red-fleshed melon with black seeds. It is peculiarly colored on the outside, being light green with vertical bands of dark green." (*Carleton.*)

6044. Citrullus vulgaris. **Watermelon.**

From the region about 40 miles east of Stavropol, Russia. "A melon of medium size, dark green outside with light-brown seeds, adapted for cultivation in the semiarid districts." (*Carleton.*)

6000 to 6110—Continued.

6045. CITRULLUS VULGARIS. **Watermelon.**

From Stavropol, Russia. "A melon of medium size, very light green on the outside with darker vertical stripes, red flesh, and spotted brown seeds. Adapted for cultivation in semiarid districts." (*Carleton.*)

6046. CITRULLUS VULGARIS. **Watermelon.**

From Ekaterinodar, Russia. "A rather large melon, dark green on the outside, with red flesh and large brown seeds." (*Carleton.*)

6047. CITRULLUS VULGARIS. **Watermelon.**

From Guiloyaksaiskaya, near Ekaterinodar, Russia. "An excellent melon of rather large size, dark green on the outside, with red flesh, brown seeds, and good flavor." (*Carleton.*)

6048. CITRULLUS VULGARIS. **Watermelon.**

From Tsaritsyn, Russia. "A rather large melon, very light green or nearly white on the outside, with light-green stripes, very small black seeds. This is one of the most common watermelons grown on a commercial scale in the Volga region." (*Carleton.*)

6049. CITRULLUS VULGARIS. **Watermelon.**

From Saratov, Russia. Mixed watermelon seeds.

6050. CITRULLUS VULGARIS. **Watermelon.**

From Uralsk, Russia. "A small round melon, greenish white on the outside, red flesh, red seeds, and very rich flavor. Grown by the Kirghiz on the steppes. Adapted for cultivation in very dry districts." (*Carleton.*)

6051. CITRULLUS VULGARIS. **Watermelon.**

From Uralsk, Russia. "A good melon of medium or small size, round, greenish white on the outside, with red flesh and small black seeds. Grown by the Kirghiz on the steppes. Adapted for cultivation in very dry districts." (*Carleton.*)

6052. CITRULLUS VULGARIS. **Watermelon.**

From Saratov, Russia. "An excellent melon of very large size, round, dark green on the outside, with large reddish-brown seeds. Grown in an extremely dry region, therefore adapted for cultivation in dry districts." (*Carleton.*)

6053. CITRULLUS VULGARIS. **Watermelon.**

From Novokhopersk, Russia. "A very fine rich-flavored melon of unusual appearance. It has the form of a crooked-neck squash, dark green on the outside, netted with lighter green, yellow flesh tinged with salmon-white seeds. Adapted for cultivation in very dry regions." (*Carleton.*)

6054. CITRULLUS VULGARIS. **Watermelon.**

From Blagodat, Russia. "An excellent melon of average size, green outside, with white flesh and spotted dark-brown seeds." (*Carleton.*)

6055. CITRULLUS VULGARIS. **Watermelon.**

From Ambrocievka, Russia. "An excellent melon of large size, dark green on the outside, with red flesh and light-brown seeds." (*Carleton.*)

6056. CITRULLUS VULGARIS. **Watermelon.**

From Dolinskaya, Russia. "A good melon of rather small size, peculiarly colored on the outside, gourd-shaped, with light-brown black-bordered seeds." (*Carleton.*)

6000 to 6110—Continued.

6057. CITRULLUS VULGARIS. **Watermelon.**

From Russia. "A very large rich melon, green outside, with red flesh and light-brown seeds." (*Carleton.*)

6058. CUCUMIS MELO. **Muskmelon.**

From Odessa, Russia. *Bread melon.* "An Egyptian melon of medium size, somewhat flattened vertically, prominently ribbed with a very rough surface, remaining green on the outside for a long time, but turning considerably yellow when fully ripe; flesh yellow, sometimes slightly tinged with salmon, rather firm. When fully ripe the flavor is excellent. It is sometimes called the Pineapple (*Ananas*) melon." (*Carleton.*)

6059. CUCUMIS MELO. **Muskmelon.**

From Sevastopol, Russia. "A melon of average size with greenish-yellow flesh and white seeds." (*Carleton.*)

6060. CUCUMIS MELO. **Muskmelon.**

From Berdiansk, Russia. "One of the common varieties of muskmelon grown in the region north of the Sea of Azov." (*Carleton.*)

6061. CUCUMIS MELO. **Muskmelon.**

From Berdiansk, Russia. "A round, smooth melon of medium size and fine flavor; flesh greenish yellow." (*Carleton.*)

6062. CUCUMIS MELO. **Muskmelon.**

From Taganrog, Russia. "An excellent, smooth-skinned melon; flesh greenish yellow." (*Carleton.*)

6063. CUCUMIS MELO. **Muskmelon.**

From Rostov-on-Don, Russia. "An excellent round melon of medium size; very smooth on the outside; flesh white with pink spots." (*Carleton.*)

6064. CUCUMIS MELO. **Muskmelon.**

From Rostov-on-Don, Russia. *Kochanka.* "One of the most popular melons grown in South Russia; rather small, round and smooth, yellowish white on the outside, with green bands or splotches; flesh green except near the seed, where it is salmon color; seeds rather large and almost white." (*Carleton.*)

6065. CUCUMIS MELO. **Muskmelon.**

From Ekaterinodar, Russia. "A rather large melon, yellowish green on the outside and netted; green flesh, very juicy, and of fairly good flavor." (*Carleton.*)

6066. CUCUMIS MELO. **Muskmelon.**

From Ekaterinodar, Russia. The same variety as No. 6064. Grown in North Caucasus.

6067. CUCUMIS MELO. **Muskmelon.**

From Tsaritsyn, Russia. *Kalminka.* "Name derived from the word Kalmuck. Melon netted, nearly round, yellow, mottled with green when ripe. Flesh green, very sweet, and good. Seeds light yellow." (*Carleton.*)

6068. CUCUMIS MELO. **Muskmelon.**

From Kamishin, Russia. *Krestyanka.* "A rather large, long melon, yellow, slightly netted. Flesh yellow, and fairly good. A popular sort in the north Volga region." (*Carleton.*)

6000 to 6110—Continued.

6069. Cucumis melo. **Muskmelon.**

From Astrakhan, Russia. "A large, round melon of excellent flavor. Seeds below medium size, brownish green in color, rather short and thick." (*Carleton.*)

6070. Cucumis melo. **Muskmelon.**

From Saratov, Russia. *Kalminka.* "A large, rather long melon of light orange color, netted greenish white; flesh very juicy and sweet. Large seeds. One of the best varieties in the Astrakhan government." (*Carleton.*)

6071. Cucumis melo. **Muskmelon.**

From Uralsk, Russia. *Bokhara.* "A rather large melon, yellowish green in color, and netted. Flesh green near the rind; salmon pink near the seeds, with very rich flavor. One of the best sorts grown by the Kirghis farmers on the east side of the Ural River." (*Carleton.*)

6072. Cucumis melo. **Muskmelon.**

From Uralsk, Russia. "A rather long melon, yellow, with dark-green spots; flesh greenish white." (*Carleton.*)

6073. Cucumis melo. **Muskmelon.**

From Povorino, Russia. "A very large melon, yellow, roughly netted with green. Flesh white, or slightly tinged with green, very firm. Flavor good. Seeds nearly white." (*Carleton.*)

6074. Cucumis melo. **Muskmelon.**

From Kharkof, Russia. *Ananas.* "Probably the same as No. 6058." (*Carleton.*)

6075. Cucumis melo. **Muskmelon.**

From Taganrog, Russia, "A melon of medium size, nearly round, yellow, surface considerably netted. Flesh green with very rich, sweet flavor near the rind.' (*Carleton.*)

6076. Cucumis melo. **Muskmelon.**

From Taganrog, Russia. *Ananas.* "Similar to No. 6074." (*Carleton.*)

6077. Cucumis melo. **Muskmelon.**

From Taganrog, Russia. "A small melon with smooth surface, netted yellow and green. Flesh green." (*Carleton.*)

6078. Cucumis melo. **Muskmelon.**

From Blagodat, estate of Mr. Rutchenko, about 20 miles north of Taganrog, Russia. *Rostov.* "An excellent melon of medium to large size, elongated or fairly round, smooth, almost white on the outside. Flesh green, very sweet, and juicy." (*Carleton.*)

6079. Pistacia vera. **Pistache.**

From Stavropol, Russia. "A variety said to come from Syria bearing unusually large nuts." (*Carleton.*)

6080. Cucumis sativus. **Cucumber.**

From Saratov, Bussia. *Pavlovskii.* "One of the standard varieties of garden cucumbers grown in the lower Volga region of Russia." (*Carleton.*)

6081. Cucumis sativus. **Cucumber.**

From Saratov, Russia. *Moscow.* "A long, dark-green variety, grown in the lower Volga region, Russia." (*Carleton.*)

6000 to 6110—Continued.

6082. CUCUMIS SATIVUS. **Cucumber.**

From Saratov, Russia. "One of the standard varieties of cucumber grown in the lower Volga region." (*Carleton.*)

6083. CUCUMIS SATIVUS. **Cucumber.**

From Saratov, Russia. *Muron.* "A rather early variety of cucumber, grown in the lower Volga region." (*Carleton.*)

6084. RAPHANUS SATIVUS. **Radish.**

From Saratov, Russia. *Moscow.* A rather long, early, white variety, grown in the region near Moscow." (*Carleton.*)

6085. RAPHANUS SATIVUS. **Radish.**

From Saratov, Russia. *Delicesse.* "An early variety of excellent flavor, grown in the region near Moscow, Russia." (*Carleton.*)

6086. RAPHANUS SATIVUS. **Radish.**

From Saratov, Russia. *Erfurt.* "A long, white variety of winter radish, grown near Moscow, Russia." (*Carleton.*)

6087. RAPHANUS SATIVUS. **Radish.**

From Saratov, Russia. "A small, round radish of good quality grown near Moscow, Russia." (*Carleton.*)

6088. CUCURBITA MAXIMA. **Pumpkin.**

From Saratov, Russia. "A good variety, grown near Moscow, Russia." (*Carleton.*)

6089. CUCURBITA MAXIMA. **Pumpkin.**

From Saratov, Russia. *Hundred pound.* "A large yellow pumpkin." (*Carleton.*)

6090. LYCOPERSICUM ESCULENTUM. **Tomato.**

From Saratov, Russia. "A very large red tomato, grown in north Caucasus, "Russia." (*Carleton.*)

6091. LYCOSPERSICUM ESCULENTUM. **Tomato.**

From Saratov, Russia. *Trophy.* "A large-fruited, late tomato, grown near Tsaritsyn, Russia." (*Carleton.*)

6092. PHASEOLUS VULGARIS. **Bean.**

From Jassy, Roumania. "A very large, white, kidney-shaped bean, grown in the northern part of Roumania." (*Carleton.*)

6093. HELIANTHUS ANNUUS. **Sunflower.**

From Taganrog, Russia. "A large, dark, gray-seeded variety, commonly used for eating, grown in southern and central Russia." (*Carleton.*)

6094. HELIANTHUS ANNUUS. **Sunflower.**

From the District Experimental Farm at Taganrog, Russia. "A variety of sunflower having small-sized, striped seeds which are used for oil." (*Carleton.*)

6095. HELIANTHUS ANNUUS. **Sunflower.**

From the field near Tikhoretskaya in Kuban Territory, North Caucasus, Russia. "A variety of sunflower having large, rather long, black seeds, much grown in North Caucasus, but not well known in other parts of Russia." (*Carleton.*)

6000 to 6110—Continued.

6096. Prunus sp. **Cherry.**

From Budapest, Hungary. "A small black cherry commonly grown in Hungary." (*Carleton.*)

6097. Prunus sp. **Cherry.**

From Budapest, Hungary. "Seeds of an excellent variety of white cherry grown in the vicinity of Budapest." (*Carleton.*)

6098. Prunus sp. **Cherry.**

From near Budapest, Hungary. *Spanish.* "Seeds of a variety of cherry commonly grown in this vicinity." (*Carleton.*)

6099. Prunus sp. **Cherry.**

From Budapest, Hungary. "Seeds of a large-fruited black cherry extensively grown in this region." (*Carleton.*)

6100. Prunus sp. **Cherry.**

From Budapest, Hungary. "Seeds of a large pink cherry grown in this vicinity." (*Carleton.*)

6101. Ribes rubrum. **Red currant.**

From Budapest, Hungary. "Seeds of a red currant of medium size grown in this vicinity." (*Carleton.*)

6102. Pyrus malus. **Apple.**

From markets of Sevastopol, Russia. *Anis.* "Seeds of one of the best and commonest varieties grown in the Crimea. A very good fruit and quite popular." (*Carleton.*)

6103. Prunus sp. **Plum.**

From Sevastopol, Russia. "A variety very similar to *Green Gage* and grown to a considerable extent in the Crimea." (*Carleton.*)

6104. Prunus sp. **Plum.**

From Sevastopol, Russia. *Ringolot.* "Seeds of one of the best varieties grown extensively in the Crimea." (*Carleton.*)

6105. Prunus sp. **Plum.**

From Sevastopol, Russia. *Mirabelle.* "A large plum of excellent flavor grown to a considerable extent in the Crimea. This and No. 6104 seem to be two of the best varieties in that region." (*Carleton.*)

6106. Prunus sp. **Plum.**

From Sevastopol, Russia. "A green sort grown to a considerable extent in the Crimea." (*Carleton.*)

6107. Prunus sp. **Cherry.**

From Belbek, Russia. "Seeds of a variety of sour cherry commonly grown in the Crimea." (*Carleton.*)

6108. Prunus sp. **Plum.**

From Rostov-on-Don, Russia. "A variety originally from the Crimea, with very large fruit of a delicious flavor when fully ripe. Possibly the same as No. 6105." (*Carleton.*)

6109. Amygdalus persica. **Peach.**

From Rostov-on-Don, Russia. "A small Crimean variety. Fruit round, purple, and very hairy. Flesh sweet near the rind, but sour next the seed." (*Carleton.*)

6000 to 6110—Continued.

6110. PYRUS COMMUNIS. **Pear.**

From Kharkof, Russia. *Yellow Flesh.* "A pear of medium size, yellow and pink in color. Extremely juicy and having an excellent flavor. By far the best pear in the Kharkof markets." (*Carleton.*)

6111. TRITICUM VULGARE. **Wheat.**

From Proskurow, Russia. Received through Dr. S. de Mrozinski, March 19, 1901.

Podolia. An excellent variety, but not so resistant to drought as Nos. 5999 and 6112.

6112. TRITICUM VULGARE. **Wheat.**

From Proskurow, Russia. Received through Dr. S. de Mrozinski, March 19, 1901.

Poltava. "An extremely drought-resistant variety." (*Mrozinski.*)

6113. PYRUS MALUS. **Apple.**

From Corfu, Greece. Presented by Mr. Antonio Colla, through Mr. D. G. Fairchild (No. 539, February 13, 1901). Received March 20, 1901.

Corfu. "Scions of a very large and delicious apple, probably a native of the island. It should be tried in the Southern States, Porto Rico, and Hawaii." (*Fairchild.*)

6114. FICUS CARICA. **Fig.**

From Corfu, Greece. Presented by Mr. Antonio Colla, through Mr. D. G. Fairchild (No. 541, February 13, 1901.) Received March 20, 1901.

Fracatsani of Corfu. "Scions of the largest and finest flavored table fig grown on the island of Corfu. Trees vigorous. Fruit light-colored and unusually large, thin-skinned, and juicy." (*Fairchild.*)

6115. CITRUS LIMONUM. **Lemon.**

From Corfu, Greece. Presented by Mr. Antonio Colla, through Mr. D. G. Fairchild (No. 542, February 13, 1901). Received March 20, 1901.

Colla giant. "Scions from a tree bearing immense fruit, some specimens weighing 2¼ pounds. Probably the same as Nos. 5982 and 5986." (*Fairchild.*)

6116. CITRUS AURANTIUM. **Orange.**

From Corfu, Greece. Presented by Mr. Antonio Colla, through Mr. D. G. Fairchild (No. 543, February 13, 1901). Received March 20, 1901.

"Scions of a variety of seedless orange. Possibly the Maltese variety." (*Fairchild.*)

6117. CITRUS LIMONUM. **Lemon.**

From Corfu, Greece. Received through Mr. D. G. Fairchild (No. 544, February 14, 1901), March 20, 1901.

"Scions of a thin-skinned, nearly seedless lemon having salmon-colored flesh. The tree is very ornamental, the leaves being variegated." (*Fairchild.*)

6118. VITIS VINIFERA. **Grape.**

From Castelnuova, Dalmatia, Austria. Received through Mr. D. G. Fairchild (No. 545, February 14, 1901), March 20, 1901.

Marzamina. "Cuttings of a heavy-bearing excellent variety of wine grape, said to have been grown in the Bocche di Cattaro since the time of the Roman occupation; said to make one of the best of Dalmatian wines." (*Fairchild.*)

6119. VITIS VINIFERA. **Grape.**

From Castelnuova, Dalmatia, Austria. Received through Mr. D. G. Fairchild (No. 546, February 14, 1901), March 20, 1901.

Marzamina genuina. "Cuttings of an old variety of wine grape, probably a native of the country. It is like No. 6118, only of superior flavor and not such a heavy bearer." (*Fairchild.*)

6120. CYDONIA VULGARIS. **Quince.**

From Corfu, Greece. Presented by Mr. Antonio Collas, through Mr. D. G. Fairchild (No. 547, February 13, 1901). Received March 20, 1901.

Corfu. "Cuttings of a very large pear-shaped quince. The trees are handsome, vigorous, and coarse growing. The quality of the fruit is poor, but its size and color may make it a desirable sort for breeders. The flesh is milder flavored than American varieties, and can be eaten raw." (*Fairchild.*)

6121. CITRUS LIMONUM. **Lemon.**

From Patras, Greece. Received through Mr. D. G. Fairchild (No. 552, February 17, 1901), March 15, 1901.

"A variety of lemon which has the reputation of being very nearly seedless." (*Fairchild.*)

6122. PISTACIA VERA. **Pistache.**

From Aintab, Syria. Presented by Rev. A. Fuller, through Mr. W. T. Swingle. Received March 26, 1901.

Aintab. "Scions of what is here regarded as the best variety of the pistachio tree. This tree does best on dry, rocky soil on mountains or hillsides." (*Fuller.*)

6123. PISTACIA VERA. **Pistache.**

From Aintab, Syria. Presented by Rev. A. Fuller, through Mr. W. T. Swingle. Received April 1, 1901.

Aintab. "Scions of what is here regarded as the best variety of the pistachio tree. This tree does best on dry, rocky, deep soil on mountains or hillsides." (*Fuller.*)

6124. VITIS VINIFERA. **Grape.**

From Aintab, Syria. Presented by Rev. A. Fuller, through Mr. W. T. Swingle. Received April 1, 1901.

Hunisa. "A large, dark wine-colored and very beautiful table grape, slightly oblong in shape. Flesh firm and fruity; ripens late (November) and has remarkable powers of keeping. Hung in a dry, cool place it will keep perfectly until April, only slightly withering as it is kept, and the flavor rather improving with age. To my mind it is the best all-round food grape I have ever seen." (*Fuller.*)

6125 to 6130. OLEA EUROPAEA. **Olive.**

From Fresno, Cal. Presented by Mr. George C. Roeding, through Mr. W. T. Swingle. Received April 6, 1901.

A collection of rooted olive cuttings as follows:

6125.

Manzanillo.

6126.

Nevadillo.

6127.

Rubra.

6128.

Mission.

6129.

Sevillano.

6130.

Pendulina.

6131. CUCUMIS MELO. **Muskmelon.**

From Marseille, France. Received through Hon. Robert P. Skinner, United States Consul-General, March 21, 1901.

Cavaillon. "These seeds should be planted under glass early in the spring and subjected to the least possible change of temperature until the weather is settled and the plants have become sufficiently advanced to warrant transplanting. This melon is one of the most valued horticultural products of southern France. It might be successfully cultivated in the latitude of Washington, and certainly in our Southern States. The fruit, when ripe, is very much the color of our green watermelons; the flesh is light green in color, highly perfumed and extremely palatable." (*Skinner.*)

6132. CANAVALIA ENSIFORMIS. **Halberd bean.**

From Morioka, Japan. Received through Rev. E. Rothesay Miller, March 9, 1901.

Nata-Mame. "This, as a string bean eaten when young, is one of the finest I have ever tasted. It grows much like pole limas, 10 feet high, and the pods are of immense size, often over a foot long and an inch and a half broad and half an inch thick. The Japanese use them generally for pickling when young, and they are very fine for this purpose, but as a string bean they are well worth introducing into the United States. They are cultivated about like pole limas, but need a warm climate for ripening. Should do well south of the latitude of Pennsylvania." (*Miller.*)

6133. CUCURBITA sp. **Crepe squash.**

From Morioka, Japan. Received through Rev. E. Rothesay Miller, March 9, 1901.

Chirimen Kabucha. "This squash is rather large, of a dark-green color, changing to yellow, sometimes even to a light greenish-blue color. The appearance is like a rough muskmelon, flattened considerably. I think it comes from Shinshu, one of the central provinces of Japan, but grows well here. It is about the best of the Japanese squashes, and is quite different from the varieties commonly grown in the United States, and may be worth cultivation." (*Miller.*)

6134. BRASSICA RAPA. **Turnip.**

From Morioka, Japan. Received through Rev. E. Rothesay Miller, March 9, 1901.

"A large white turnip, possibly worth cultivating for stock feeding." (*Miller.*)

6135. RAPHANUS SATIVUS. **Radish.**

From near Tokyo, Japan. Received through Rev. E. Rothesay Miller, March 9, 1901.

Daikon. "This is the immense radish used by the Japanese for pickling and eaten by them three times a day. The seeds I send are of an especially large and fine variety which grows near Tokyo." (*Miller.*)

6136. RAPHANUS SATIVUS. **Radish.**

From Sakura Island, Japan. Received through Rev. E. Rothesay Miller, March 9, 1901.

Sakura-gima Daikon. "This is another variety of the 'Daikon' radish, grown on Sakura Island, in the Bay of Kagoshima. It is not long, like No. 6135, but turnip shaped, and grows to such an immense size that the natives say two of them make a horse load." (*Miller.*)

6137. RAPHANUS SATIVUS. **Radish.**

From Sakura Island, Japan. Received through Rev. E. Rothesay Miller, March 9, 1901.

Sakura-gima Daikon. "The same as No. 6136, but can be planted about two weeks later." (*Miller.*)

6138. CORYLUS TUBULOSA. **Hazelnut.**

From Rovigno, Austria. Received through Mr. D. G. Fairchild (No. 509, January 19, 1901), March 23, 1901.

Pignatele. "Plants of a small hazelnut, inferior in quality to No. 6139. May, however, be worthy of trial in comparison with American varieties." (*Fairchild.*)

6139. CORYLUS TUBULOSA. **Hazelnut.**

From Rovigno, Austria. Received through Mr. D. G. Fairchild (No. 508, January 19, 1901), March 23, 1901.

Noce lunghe. "Plants of the best variety of Rovigno hazelnut. This variety is grown only in the Province of Istria and because of its scarcity is not much exported. It is a variety not reproduced from seed; requires a calcareous dry soil, and is said to be a heavy bearer. The size of the nuts will recommend them to American growers. In quality of kernel I consider them inferior to those of *Corylus pontica.* The plant forms a small tree, 12 to 15 feet high, with rather handsome trunk and graceful branches; would be an ornament to any garden. This variety will stand a temperature of −14° F. easily and probably much lower. I consider it a promising addition to American nut-bearing trees, and it deserves a thorough distribution through the South. Secured through the kindness of Emil Watzke, of Rovigno." (*Fairchild.*)

6140. VITIS VINIFERA. **Grape.**

From Sebenico, Austria. Received through Mr. D. G. Fairchild (No. 505, January 17, 1901), March 23, 1901.

Marascina. "Cuttings of the delicate variety of grape from which the famous Marascina wine (not the liqueur) is made. The vines are not very hardy and are subject to Peronospora. From the region where the sort originated and the only place where the wine is still manufactured." (*Fairchild.*)

6141. PINUS BRUTIA. **Pyrenean pine.**

From Triest, Austria. Received through Mr. D. G. Fairchild (No. 506, January 18, 1901), March 23, 1901.

"Pyrenean pine, a variety especially valuable for its rapid growth and ability to endure drought. Indigenous to Syria, Asia Minor, Cyprus, Crete, and parts of Italy. This has been used with great success on the dry limestone soil of the *Karst* formation. It makes a handsome showing in from two to three years; especially recommended for planting in the warmer regions of the South on limestone soil." (*Fairchild.*)

6142. CHRYSANTHEMUM CINERARIAEFOLIUM. **Pyrethrum.**

From Milna, Brač Island, Austria. Received through Mr. D. G. Fairchild (No. 507, January 4, 1901), March 23, 1901.

"Seed from a locality noted for its continued profitable production of the Dalmatian insect powder, notwithstanding American and Australian competition." (*Fairchild.*)

6143. CERATONIA SILIQUA. **Carob.**

From Triest, Austria. Received through Mr. D. G. Fairchild (No. 510, January 20, 1901), March 10, 1901.

Carob. (See No. 3112, Inventory No. 7.)

6144. LIATRIS ODORATISSIMA. **Vanilla plant.**

From Biloxi, Miss. Received through Mr. S. M. Tracy, February, 1901.

6145. CRAMBE MARITIMA. **Sea kale.**

From Centralia, Kans. Received through Mr. A. Oberndorf, jr., March 27, 1901.

6146. CUCUMIS MELO. **Muskmelon.**

From Hungary. Presented by Dr. L. Waltherr, Inanda, N. C. Received March 28, 1901.

Turkestan. "The Turkestan muskmelons were imported into Hungary by the famous linguist, Wambery, nearly fifty years ago from Turkestan, Central Asia, and the importation was a great success. The fruit is sometimes round, sometimes oblong, and weighs sometimes even 7 kilograms. The rind has a special yellow color, is sometimes netted; the flesh has a greenish yellow color, is very sweet and juicy, and so soft that it must be eaten with a spoon. It is far superior to any muskmelons of this country." (*Waltherr.*)

6147. CUCUMIS MELO. **Muskmelon.**

From Hungary. Presented by Dr. L. Waltherr, Inanda, N. C. Received March 28, 1901.

Pineapple. "A variety having fruit of the shape of a pineapple, with the same half-yellow, half-green color as that of a half-ripe pineapple, and the rind is sprinkled with small tuberous prominences from the size of a pea to the size of a hazelnut, so that it resembles a pineapple at a distance. The flesh is hard, sweet, and has a deep yellow color like an orange rind." (*Waltherr.*)

6148. CUCUMIS MELO. **Muskmelon.**

From Hungary. Presented by Dr. L. Waltherr, Inanda, N. C. Received March 28, 1901.

"A hybrid of Turkestan No. 6146, and pineapple No. 6147; delicious to eat." (*Waltherr.*)

6149 to 6159. CITRULLUS VULGARIS. **Watermelon.**

From Hungary. Presented by Dr. L. Waltherr, Inanda, N. C. Received March 28, 1901.

A collection of Hungarian varieties as follows:

6149.

6150.

"With white rind and red flesh; very fine." (*Waltherr.*)

6151.

6152.

"Very fine." (*Waltherr.*)

6153.

"Very fine." (*Waltherr.*)

6154.

6155.

6156.

"Very fine." (*Waltherr.*)

6157.

Marsowsky. "Finest kind in Hungary." (*Waltherr.*)

6158.

6159.

6160.

From Guadalupe, Mexico. Presented by Dr. L. Waltherr, Inanda, N. C. Received March 28, 1901.

Cinco palomas. "An ornamental plant, the flowers of which resemble five pigeons; hence the Mexican name 'Cinco palomas.'" (*Waltherr.*)

6161. TAXUS BACCATA. **Yew.**

From Hungary. Presented by Dr. L. Waltherr, Inanda, N. C. Received March 28, 1901.

6162. PYRUS BACCATA. **Siberian crab apple.**

From the Khabarovsk forest. Presented by the Department of Agriculture, St. Petersburg, Russia. Received April 20, 1901.

6163. SPIROSTACHIS OCCIDENTALIS.

From Byron, Cal. Received through Prof. J. Burtt Davy, April 1, 1901.

6164. CANNABIS INDICA. **Hemp.**

From Calcutta, India. Received through Prof. D. Prain, superintendent of the Sibpur Botanical Garden, April, 1901.

Hasheesh, the well-known opiate, is extracted from the resin of this plant.

6165 to 6168. BETA VULGARIS. **Chard.**

From San Giovannia a Teduccio, Italy. Received through Dammann & Co., April 1, 1901.

6165.

Chilean scarlet-ribbed.

6166.

Silver-ribbed (yellowish white).

6167.

Chilean yellow-ribbed.

6168.

Silver-ribbed, curled.

6169. RAPHANUS SATIVUS. **Radish.**

From Acneta, Cal. Received March 25, 1901. Seed grown from No. 1237, Inventory No. 2.

6170. CITRULLUS VULGARIS. **Watermelon.**

From Forestburg, S. Dak. Received through Mr. H. C. Warner, March 19, 1901. Seed grown from No. 61, Inventory No. 1.

"This was the best in quality of 80 varieties in two different seasons. Medium size, oblong, light and dark-green striped, sometimes all light. Flesh dark red, sweet, very rich, early." (*Warner.*)

6171. CITRULLUS VULGARIS. **Watermelon.**

From Forestburg, S. Dak. Received through Mr. H. C. Warner, March 19, 1901. Seed grown from No. 105, Inventory No. 1.

"Medium size, round, light and dark-green striped, flesh red, sweet; productive, early." (*Warner.*)

6172. ZEA MAYS. **Corn.**

From Summerville, S. C. Received through Mr. H. A. Jamison, March, 1901. Egyptian. Seed grown from No. 3998, Inventory No. 8.

6173. IPOMOEA BATATAS. **Sweet potato.**

From Manatee, Fla. Received through Mr. A. J. Pettigrew, March, 1901.

6174. AVENA SATIVA. **Oat.**

From Mustiala, Finland. Received through Messrs. Lathrop and Fairchild (No. 425), April 3, 1901.

North Finnish Black. "Dr. Gösta Grotenfelt, director of the Agricultural Institute of Mustiala, has grown this *Black* oat from seed imported from Torneå, Paavola, and Umeå (this latter in Sweden). He finds the seed from Torneå and Umeå very similar, but the Paavola variety is somewhat browner, not black and gray in color like the other two sorts. He has also compared the *North Finnish Black* with Canadian oats, which he got through the seed-breeding institute of Svalöf, Sweden. The comparison is as follows: *Canada* took one hundred and thirteen days to ripen, while the *North Finnish Black* took only ninety-eight days. The latter is the average for four years (1892–1895). In comparison with all sorts of foreign-grown varieties the figures for the four years stand as 98.9: 111.8 days for ripening period. Dr. Grotenfelt says that the yield is small. For 1895, 42.4 kilos of dried straw and grain (air dried) per *are.* The foreign sorts yielded in the same year 49.1 kilos per *are.* The grain yield of the *North Finnish Black* variety was 12.6 kilos per *are*, while the foreign varieties yielded 16.4 kilos per *are*. These foreign sorts, it must be remarked, were all varieties which had been especially bred—some from Svalöf and others from the experiment station in Tystofte, in Denmark. During *six years of cultivation at Mustiala this North Finnish Black oat has lost none of its early-ripening qualities.* In good years the foreign-grown sorts here yield best, but in bad season *they yield nothing at all, while the North Finnish Black always yields about the same amount.* This variety deserves thorough trial in Alaska and the North Atlantic States, and should be used for breeding purposes wherever an early ripening variety of oat is desired. To get the best results it should be sown as early as possible. These various varieties have been analyzed in Mustiala, and it has been found that the *North Finnish Black* variety has 13.58 per cent of dry weight of *protein*, while the *South Finnish Brown* oat, for example, only 10.7 per cent, and the *South Finnish White* 11.77 per cent, and foreign oats only 11.79 per cent *protein*. Although, because of the small yield of the *North Finnish Black* variety, the actual protein quantity per *are* is smaller than that of the foreign sorts, the fact that the former is really richer in protein is an important point for plant breeders. The figures are: *North Finnish Black*, 1.54 kilos per *are;* foreign, including *Canada* variety, 1.73 per *are*. There have so far been very few experiments here in Finland *en gros*. Those few have been, however, very satisfactory." (*Fairchild.*) (See No. 5513.)

6175. HORDEUM TETRASTICHUM. **Barley.**

From Mustiala, Finland. Received through Messrs. Lathrop and Fairchild (No. 426, August 1, 1900), April 3, 1901.

Four-rowed Lapland. "This comes from Pillo, a town lying 30 kilometers north of the Arctic Circle. It is a stunted variety, which ripens at least 10 to 14 days earlier than South Finnish or European varieties, and although it does not produce large quantities of grain, but small kernels and in small quantity, it deserves the especial attention of plant growers in Alaska. Dr. G. Grotenfelt is at the present time busy with its culture and hopes to maintain its earliness and, by crossing, increase its productiveness. At the present time it is almost ripe here in the Doctor's experimental plats, while all other sorts (except No. 427, L. & F.) are quite green. For a very short-season locality and also for breeding purposes this may prove of considerable value where barley is grown. Secured through Dr. Grotenfelt's kindness." (*Fairchild.*)

6176. BRASSICA RAPA. **Turnip.**

From Mustiala, Finland. Received through Messrs. Lathrop and Fairchild (No. 428, August 1, 1900), April 3, 1901.

White Tankard Purple Top. "A Scottish variety of fodder turnip which has been grown here for fifty years. This variety, grown on Finnish soil, has proved superior to that grown from seed imported from Scotland, and it is worthy a trial in Alaska. Its growth in spring is particularly rapid, and it therefore escapes the attacks of insect enemies better than other sorts. Will be sent by Director G. Grotenfelt in November." (*Fairchild.*)

6177. FAGOPYRUM ESCULENTUM. **Buckwheat.**

From Mustiala, Finland. Received through Messrs. Lathrop and Fairchild (No. 430, August 1, 1900), April 3, 1901.

Finnish. "This buckwheat is for planting in Alaska. It is believed to be an early ripening variety. It is cultivated in east Finland on a large scale, but little in west Finland. It is now in bloom in Doctor Grotenfelt's experimental plats. Will be sent by Doctor Grotenfelt in November." (*Fairchild.*)

6178. BRASSICA CAMPESTRIS. **Turnip.**

From Mustiala, Finland. Received through Messrs. Lathrop and Fairchild (No. 429, August 1, 1900), April 3, 1901.

Mustiala. "A variety of Swedish turnip which has been originated here in Mustiala and grown for over fifteen years. It is the best sort that has been tested here and is very regular in growth and altogether to be recommended for fodder purposes in Alaska." (*Fairchild.*)

6179. BRASSICA RAPA. **Turnip.**

From Mustiala, Finland. Received through Messrs. Lathrop and Fairchild (No. 432, August 1, 1900), April 3, 1901.

Finnish Svedje. "This is one of the few originations of the old Finnish people. It is called *Svedje* because it is grown on soil that has been burned over, i. e., in new clearings. The seed was sown by the peasants by taking into the mouth and spitting out as a Chinaman sprinkles clothes. It is a small variety, said to be of superior flavor, and is baked in the oven in butter after being pulled, a little boiling water being added as the turnips become brown. It can be grown in the Arctic Circle, and is a highly prized vegetable, worthy of especial attention." (*Fairchild.*)

6180. JUGLANS REGIA. **Walnut.**

From Patras, Greece. Received through Mr. D. G. Fairchild (No. 553), April 4, 1901.

"Cuttings from a single tree on the estate of Mr. S. D. Stamo which bears nuts that are unusually large and thin shelled." (*Fairchild.*)

6181. JUGLANS REGIA. **Walnut.**

From Zante, Greece. Received through Mr. D. G. Fairchild (No. 554, February 21, 1901), April 4, 1901.

"Cuttings from a single tree on the estate of Mr. Angalotti, at Bocali, which bore nuts that are somewhat irregular in form, but of very large size, some specimens measuring 6 inches in circumference, and so thin shelled that they can be crushed in the hand; not as large nor as regular in shape, however, as No. 6182. The quality is excellent and the tree reported to be a good bearer." (*Fairchild.*)

6182. JUGLANS REGIA. **Walnut.**

From Zante, Greece. Received through Mr. D. G. Fairchild (No. 555, February 21, 1901), April 4, 1901.

"Cuttings from a single tree growing through the roof of a small shop near the house of one Sig. Machalitza, in the town of Zante. The nuts are regular in form and of very unusual size, measuring $5\frac{13}{16}$ by $5\frac{13}{16}$ inches in both circumferences. Heavy, and said to be well filled with an excellent flavored meat." (*Fairchild.*)

6183. CYDONIA SINENSIS. **Chinese quince.**

From Zante, Greece. Received through Mr. D. G. Fairchild (No. 556, February 21, 1901), April 4, 1901.

"Cuttings of the *scented quinces* called "musk," "citron," or "Japanese" quinces; grown in this vicinity. The fruits are very large and woody and seldom used for preserving. Their principal value is as ornamentals and as perfume fruits to store away with linen to give it an agreeable odor." (*Fairchild.*)

6184. CITRUS AURANTIUM. **Orange.**

From Zante, Greece. Received through Mr. D. G. Fairchild (No. 557, February 21, 1901) April 4, 1901.

Queen. "The trees from which these cuttings were taken are the only bearing trees of the kind on the island. The fruit is of a dark orange color, almost seedless, and of very fine flavor. It is worth trying in California and Florida orchards." (*Fairchild.*)

6185. CITRUS LIMONUM. **Lemon.**

From Zante, Greece. Received through Mr. D. G. Fairchild (No. 558, February 22, 1901) April 4, 1901.

"Cuttings of a thick-skinned, nearly seedless, variety of lemon growing in the monastery garden of Kalitero. Very juicy and extremely acid." (*Fairchild.*)

6186. CYDONIA SINENSIS. **Chinese quince.**

From Zante, Greece. Received through Mr. D. G. Fairchild (No. 559) April 4, 1901.

Cuttings from a seedling quince, possibly the same as No. 6183. *See also* No. 6362.

6187. CYDONIA VULGARIS. **Quince.**

From Zante, Greece. Received through Mr. D. G. Fairchild (No. 560, February 22, 1901) April 4, 1901.

Apple. "Cuttings of the favorite quince of Zante, used for preserves, marmalades, and as a table fruit. When fully ripe they are eaten like apples, which they resemble in shape." (*Fairchild.*)

6188. CYDONIA SINENSIS. **Chinese quince.**

From Zante, Greece. Received through Mr. D. G. Fairchild (No. 561, February 21, 1901) April 4, 1901.

"Cuttings of a small, scented quince grown for its sweet-scented fruit, which is not edible." (*Fairchild.*)

6189. PINUS PINEA. **Stone pine.**

From Zante, Greece. Presented by Count S. Lunzi through Mr. D. G. Fairchild (No. 562, February 21, 1901). Received April 4, 1901.

"The edible seeds of this pine are so thin shelled that they can be easily broken with the fingers, while the ordinary type has such hard-shelled seeds that they must be broken open with a hammer. Should be tried in the dry parts of Florida and the Southwest." (*Fairchild.*)

6190. CITRUS LIMONUM. **Lemon.**

From Zante, Greece. Presented by Mr. Geo. Sargint through Mr. D. G. Fairchild (No. 563, February 22, 1901). Received April 4, 1901.

"A young plant grown from a bud of an old lemon tree that has always borne seedless fruit." (*Fairchild.*)

6191. ERIOBOTRYA JAPONICA. **Loquat.**

From Zante, Greece. Presented by Mr. Geo. Sargint through Mr. D. G. Fairchild (No. 564, February 22, 1901). Received April 4, 1901.

"Two young plants grown by Castagnias Aristides from cuttings of an old loquat tree reported to bear only seedless fruits." (*Fairchild.*)

6192. VIOLA ODORATA. **Violet.**

From Zante, Greece. Received through Mr. D. G. Fairchild (No. 565, February 22, 1901) April 4, 1901.

Parmensis. Plants of a very large double violet exported from Zante to all parts of Greece. Lacking in perfume. Grown in the open air in Zante, not under glass.

6193. CYDONIA VULGARIS. **Quince.**

From Zante, Greece. Received through Mr. D. G. Fairchild, April 4, 1901. No data.

6194. CANNABIS SATIVA. **Hemp.**

From Yokohama, Japan. Received through L. Boehmer & Co., April 5, 1900.

6195. RHUS CORIARIA. **European sumac.**

From Paris, France. Received through Vilmorin-Andrieux & Co., April 5, 1901.

6196. SEQUOIA SEMPERVIRENS. **Redwood.**

From Berkeley, Cal. Received through Mr. Charles H. Shinn, April 6, 1901.

6197. CUCURBITA MOSCHATA. **Cushaw.**

From Oakgrove, Ind. Received through Mr. H. A. Allen, April 4, 1901.

6198. BRASSICA NAPUS. **Rape.**

From La Crosse, Wis. Received through John A. Salzer Seed Company, April, 1901.

Dwarf Victoria.

6199. LINUM USITATISSIMUM. **Flax.**

From Paris, France. Received through Vilmorin-Andrieux & Co., April 8, 1901.

Irish-grown seed.

6200 to 6220. ORYZA SATIVA. **Rice.**

From the Philippine Islands. Presented by Hon. J. Aranato, secretary of agriculture of the island of Negros. Received March 9, 1901.

A collection of native varieties of rice as follows:

6200.

Capao. An early variety, to be sown on irrigated land in May and harvested in September.

6201.

Gui-os. An early variety, sown on irrigated land in May and harvested in September.

6202.

Cabatiñgan. An early variety, sown on irrigated or dry land in May and June and harvested in September and October. The grains of this variety, after being boiled, cling together and are therefore adapted for use in the preparation of jellies.

6203.

Buñga-tagum. An early variety, sown on irrigated land early in June and harvested early in October. The grain is very white and highly esteemed for food.

6204.

Morado.

6205.

Cachuri. An early, "fragrant" variety, sown in April and harvested in August. Cultivated on the mountain slopes. Its principal use is for the manufacture of "Pilipig."

6206.

Mayuro. An early variety, sown on irrigated land early in June and harvested in October. The grain is very white and highly esteemed for food.

6207.

Baráo. An early variety, sown on irrigated land early in June and harvested at the end of October.

6208.

Cotsiam. An early rice, sown on irrigated land in April and May and harvested in August and September.

6200 to 6220—Continued.

6209.

Caayaá. An early variety, sown on irrigated land early in June and gathered in October. The grain is red and is valued as an article of food.

6210.

Cabunlog. A late variety sown on irrigated land at the end of June or early in July and gathered in December or early in January.

6211.

Piracát. An early variety, sown on dry land in May and gathered in September. The grains of this rice cling together after being boiled, and this substance is used in the preparation of dainties.

6212.

Lubang. An early variety, sown on either irrigated land or dry land in May or June and harvested in September or October.

6213.

Lumantao. An early variety, sown on irrigated or dry land in May or June and harvested in September or October.

6214.

Dagul-pilit. A late variety, sown on dry or irrigated lands in May and harvested in November. The grains of this rice cling together after being boiled and are used for making delicacies.

6215.

Caba. An early variety, sown on irrigated land early in June and harvested the last of October.

6216.

Tapul-pilit. A late variety, sown on irrigated land late in June or early in July and harvested in December and January.

6217.

Calanay-pilit. A late variety, sown on irrigated land late in June or the first of July and harvested in December and January.

6218.

Tapúl-pilit. An early variety, sown on dry land in May and harvested in September. The grains of this are dark, and when boiled cling together and serve for the making of delicacies.

6219.

Macau. A late variety, sown on irrigated lands late in June or early in July and harvested in December and January.

6220.

Soladong. A late variety, sown on irrigated land the last of June and first of July; harvested in December and January.

6221 to 6238.

From the Philippine Islands. Presented by Hon. J. Aranato, secretary of agriculture of the island of Negros. Received March 9, 1901.

A collection of seeds of economic plants grown by the natives, as follows:

6221. CHAETOCHLOA ITALICA. **Millet.**

Dana. An early-maturing grass, the seeds of which are used for making jellies.

6221 to 6238—Continued.

6222. Sesamum indicum. **Sesame.**

Lunga. Sown in May and harvested in October. The oil of "ojonjoli" is extracted from the seeds.

6223. Dolichos sinensis (?). **Bean.**

Balatong.

6224. Phaseolus mungo. **Gram.**

Mongo.

6225. **Bean.**

Marayo. A black climbing bean, sown in May and harvested in October; used for pottage.

6226. Phaseolus calcaratus. **Bean.**

Tajori. A yellow climbing bean, sown in May and harvested in October; used for pottage.

6227. **Pea.**

Native name, *Cadios.* An undetermined variety of pea.

6228. Dolichos sinensis. **Bean.**

Lestones. A climbing bean, sown in May and harvested in September; used for pottage.

6229. Nicotiana tabacum. **Tobacco.**

6230. Zea mays. **Corn.**

An early variety; sown in May and harvested in August and September.

6231. Zea mays. **Corn.**

The first crop from American seed.

6232. Zea mays. **Corn.**

The second crop from American seed.

6233. Zea mays. **Corn.**

An early purple variety; sown in May and harvested in August and September.

6234. Musa textilis. **Manila hemp.**

Abaca-Bisaya. In the island of Negros it is the custom to sow the seed of this plant in the months of May, June, and July.

6235. Musa textilis. **Manila hemp.**

Abaca-Kinisol. In the island of Negros it is the custom to sow the seed of this plant in the months of May, June, and July.

6236. Musa textilis. **Manila hemp.**

Abaca-Moro. In the island of Negros it is the custom to sow the seed of this plant in the months of May, June, and July.

6237. Musa textilis. **Manila hemp.**

Abaca-Lono. In the island of Negros it is the custom to sow the seed of this plant in the months of May, June, and July.

6238. (Museum specimen.)

6239. MUSA TEXTILIS. **Manila hemp.**

Museum specimen only.

6240. OLEA EUROPAEA. **Olive.**

From Fresno, Cal. Presented by Mr. George C. Roeding, through Mr. W. T. Swingle. Received April 6, 1901.

Obliza.

6241 to 6243. FICUS CARICA. **Caprifig.**

From Fresno, Cal. Presented by Mr. George C. Roeding, through Mr. W. T. Swingle. Received April 6, 1901.

6241.

Roeding's No. 1 variety.

6242.

Roeding's No. 2 variety.

6243.

Roeding's No. 3 variety.

6244. FICUS CARICA. **Fig.**

From Fresno, Cal. Presented by Mr. George C. Roeding, through Mr. W. T. Swingle. Received April 6, 1901.

Smyrna.

6245. CITRUS AURANTIUM. **Orange.**

From Mustapha, Algiers, Algeria. Presented by Dr. L. Trabut, Government Botanist, through Mr. W. T. Swingle. Received April 8, 1901.

6246. CITRUS DECUMANA. **Pomelo.**

From Eustis, Fla. Presented by Mr. Frank W. Savage, through Mr. W. T. Swingle. Received April 8, 1901.

6247. CITRUS NOBILIS (?). **Orange.**

From Eustis, Fla. Presented by Mr. Frank W. Savage, through Mr. W. T. Swingle. Received April 8, 1901.

King, or King of Siam.

6248. CITRUS AURANTIUM. **Orange.**

From Eustis, Fla. Presented by Mr. Frank W. Savage, through Mr. W. T. Swingle. Received April 8, 1901.

Sanford Mediterranean.

6249. CITRUS AURANTIUM. **Orange.**

From Eustis, Fla. Presented by Mr. Frank W. Savage, through Mr. W. T. Swingle. Received April 8, 1901.

Ruby blood.

6250. CITRUS DECUMANA. **Pomelo.**

From Eustis, Fla. Presented by Mr. Frank W. Savage, through Mr. W. T. Swingle. Received April 8, 1901.

Aurantium.

6251. OLEA EUROPAEA. **Olive.**

From Mustapha, Algiers, Algeria. Presented by Dr. L. Trabut, Government Botanist, through Mr. W. T. Swingle. Received April 30, 1901.

Mascara, a variety from M. Jaubert's place at Inkermann. Thought by Mr. Swingle to be possibly the very large sort, the fruit of which sometimes weighs 17 grams. Doctor Trabut considers it the same as the variety *Bréa* of Tlemsen.

6252. PISTACIA VERA. **Pistache.**

From Mustapha, Algiers, Algeria. Presented by Dr. L. Trabut, Government Botanist, through Mr. C. S. Scofield. Received May 22, 1901.

Sfax (female). "The sort grown about Sfax, Tunis, where large quantities of pistaches were formerly produced. It is said to be a good variety and was formerly largely exported, but of late prices have declined and exports from Sfax ceased. This variety was obtained last year from the same tree and was sent through the University of California to Mr. G. P. Rixford, who succeeded in grafting it on the terebinth tree on his place in Sonoma County." (*Swingle.*)

6253. PISTACIA VERA. **Pistache.**

From Mustapha, Algiers, Algeria. Presented by Dr. L. Trabut, Government Botanist, through Mr. C. S. Scofield. Received May 22, 1901.

Sfax (male). "Scions from male tree growing in the botanical garden of the *Écoles Superieures* at Algiers." (*Scofield.*) See No. 6252.

6254. FICUS CARICA. **Caprifig.**

From Maison Carrée, near Algiers, Algeria. Presented by M. Lepiney through Mr. C. S. Scofield. Received May 28, 1901.

6255 to 6258.

(Numbers not utilized.)

6259. XIMENIA AMERICANA. **Hog plum.**

From Miami, Fla. Presented by Mr. H. C. Henricksen. Received May 21, 1901.

6260 to 6271.

A collection of Danish vegetable seed.

6260. BETA VULGARIS. **Beet.**

Yellowstone. "Yellow, bottle-shaped; is a half-breed beet of unusual yielding ability in connection with great nutritive substance; requires an early sowing, but does not make great claims as to soil. It is a comparatively new variety, which is in great demand." (*Kolle Bros.*)

6261. BETA VULGARIS. **Beet.**

McKinley. "Pink, bottle-shaped. It combines yielding power with nutritive substance, but wants a rich, warm soil. Under these conditions it is a variety of high value." (*Kolle Bros.*)

6262. BETA VULGARIS. **Beet.**

Adam. "White, cylinder-shaped variety, which ranges between the common fodder beets and fodder sugar beets. Combines good yielding power with a respectable nutritive substance. It requires a somewhat low-situated, deep-molded soil, and, thus placed, it will scarcely be exceeded by any other beet variety in regard to yielding power." (*Kolle Bros.*)

6263. BETA VULGARIS. **Beet.**

Red Oberndorfer. "This is an improved old variety which, by strict selection in field and laboratory, has attained its standing among 'bell-shaped beets.' It is particularly fit for a warm, light soil." (*Kolle Bros.*)

6260 to 6271—Continued.

6264. Beta vulgaris. **Beet.**

Red Eckendorfer. "Like *Red Oberndorfer*, it is an old variety which by treatment has reached perfection. Its value lies in its great yielding power, while its nutritive contents are rather low. In order to attain its full development it should be sown in moldy, well-fertilized, moist soil." (*Kolle Bros.*)

6265. Brassica rapa. **Turnip.**

Fiona.

6266. Brassica oleracea *var.* botrytis. **Cauliflower.**

Danish Mammoth. Grown on the island of Fyen, Denmark.

6267. Brassica oleracea *var.* botrytis. **Cauliflower.**

Extra Early Dwarf Erfurt. Grown on the farm of the royal palace, Fredricksburg.

6268. Brassica oleracea *var.* botrytis. **Cauliflower.**

Danish Snowball.

6269. Brassica oleracea *var.* botrytis. **Cauliflower.**

Extra Early Dwarf Erfurt. Grown on the island of Fyen, Denmark.

6270. Brassica oleracea *var.* botrytis. **Cauliflower.**

Extra Early Improved Erfurt. Grown on the island of Zealand, Denmark.

6271. Brassica oleracea *var.* botrytis. **Cauliflower.**

Copenhagen Snowball. Grown at Copenhagen, Denmark.

6272. TRITICUM VULGARE. **Wheat.**

From Volo, Greece. Presented by Mr. Ar. Tsakonas, of Athens, through Mr. D. G. Fairchild (No. 581, March 23, 1901). Received April 15, 1901.

Diminum. "A spring variety. The name means 'two months.' This is a semihard sort, used in Greece to plant after the failure of the winter wheat is known. It is not a two months' wheat, as the name implies, but matures in about three months, being planted the last of February and harvested the first of June. It is a light bearer and not very highly esteemed in Greece, except for the purpose described." (*Fairchild.*)

6273 to 6278.

From the Philippine Islands. Presented by Hon. J. Aranato, secretary of agriculture of the island of Negros. Received March 9, 1901. A collection of seeds as follows:

6273. Zea mays. **Corn.**

"Early; sown in May, harvested in August and September." (*Aranato.*)

6274. Theobroma cacao. **Cacao.**

6275.

Nanca. "A tree which matures at five or six years of age. The fruits, called 'Nanca,' as well as the leaves, are used as greens when young, and when mature the fruit is used as dessert." (*Aranato.*)

6276.

Dagmay. "A bulbous plant which is sown in May and harvested the January following. It grows well in light, loose, rich soil and requires to be kept well covered to produce any shoots. It is used in cooking to take the place of the sweet potato or ordinary potato." (*Aranato.*)

6273 to 6278—Continued.

6277. Dioscorea sp.?

Tamis. "A twining tuberous plant, which is sown in May and harvested the following January. It requires stakes about 7 feet high, grows best in a loose, well-fertilized soil, and its roots should be frequently covered with earth. It is used in cooking as a substitute for the potato and sweet potato." (*Aranato.*)

6278. Coffea arabica. **Coffee.**

6279. PHASEOLUS sp. **Bean.**

From China. Received from Mr. J. Lawton Taylor, Honolulu, Hawaii, April 16, 1901.

Meru (?). "Very mealy or granular when boiled." (*Taylor.*)

6280 to 6299. VITIS sp. **Grape.**

From Departmental Nursery of Maine and Loire, France. Received from Mr. Louis Leroy, Angers, France, April 19, 1901.

A collection of phylloxera-resistant varieties for use as stocks.

6280.
Riparia × *Rupestris* 101.

6281.
Mourvedre × *Rupestris* 1202.

6282.
Bourrisquou × *Rupestris* 603.

6283.
Berlandieri × *Riparia* 157–11.

6284.
Chasselas × *Berlandieri* 41.

6285.
Colorado E.

6286.
Colombard × *Rupestris* 3103.

6287.
Bourrisquou × *Rupestris* 601.

6288.
Solonis × *Riparia* 1616.

6289.
Riparia grand glabre.

6290.
Pure Berlandieri.

6291.
Monticola × *Riparia* 554.

6292.
Riparia × *Rupestris* 3309.

6293.
Aramon × *Rupestris* 2.

6294.
Aramon × *Rupestris Ganzin* 1.

6296.
Rupestris du Lot.

6297.
Rupestris Martin.

6298.
Aramon × *Rupestris Ganzin* 1.

6299.
Riparia Gloire de Montpellier.

6300 to 6306. VITIS sp. **Grape.**

From Caplat. A collection of grapes, No. 6300 being Japanese and the others Chinese. Received through Mr. Louis Leroy, Angers, France, April 19, 1901.

6300.
Precoçe Caplat.

6301.
Alenconnaise (new).

6302.
Romaneti trilobées.

6303.
Tisserandi. inédite de Mandchurie.

6304.
Morandi.

6305.
Pagnacci.

6306.
Romaneti.

6307 to 6339.

From the Tokyo Seed and Plant Company, Tokyo, Japan. Received April 20, 1901.

A collection of miscellaneous seeds, as follows:

6307. Oryza sativa. **Rice.**

Sugaichi.

6308. Oryza sativa. **Rice.**

Adzuma Nishiki.

6309. Cannabis sativa. **Hemp.**

Shimonita.

6310. Cannabis sativa. **Hemp.**

Hiroshima.

6311. Vigna catjang. **Cowpea.**

Black Jurokusasage.

6312. Glycine hispida. **Soy bean.**

Black Flat.

6313. Vicia faba. **Broad bean.**

Large Soramame.

6314. Glycine hispida. **Soy bean.**

Yoshioka.

6315. Vicia faba. **Broad bean.**

Early Soramame.

6316. Pisum sativum. **Pea.**

6317. Cannabis sativa. **Hemp.**

Tochigi.

6318. Phaseolus mungo-radiatus. **Gram.**

Muroran.

6319. Dolichos lablab. **Hyacinth bean.**

White.

6320. Dolichos lablab. **Hyacinth bean.**

Purple.

6321. Phaseolus mungo-radiatus. **Gram.**

Yainari.

6322. Cannabis sativa. **Hemp.**

Aidzu.

6323. Canavalia ensiformis. **Knife bean.**

White Natamame.

6307 to 6339—Continued.

6324. CANAVALIA GLADIATA. **Knife bean.**

Pink Natamame.

6325. CANNABIS SATIVA. **Hemp.**

Iwate.

6326. GLYCINE HISPIDA. **Soy bean.**

Rokugatsu.

6327. VIGNA CATJANG. **Cowpea.**

Kurakake.

6328. VIGNA CATJANG. **Cowpea.**

Kintohi.

6329. ASTRAGALUS SINICUS. **Genge clover.**

An early variety of this clover. (See No. 3725, Inventory No. 8.)

6330. ASTRAGALUS SINICUS. **Genge clover.**

A late variety of this clover. (See No. 3725, Inventory No. 8.)

6331. LESPEDEZA BICOLOR. **Bush clover.**

Hagi.

6332. PISUM SATIVUM (?). **Red fodder pea.**

6333. GLYCINE HISPIDA. **Soy bean.**

Gosha.

6334. GLYCINE HISPIDA. **Soy bean.**

Black Round.

6335. GLYCINE HISPIDA. **Soy bean.**

Green Medium.

6336. GLYCINE HISPIDA. **Soy bean.**

Bakaziro.

6337. BOEHMERIA NIVEA. **Ramie.**

No. 1.

6338. BOEHMERIA NIVEA. **Ramie.**

No. 2.

6339. BOEHMERIA NIVEA. **Ramie.**

No. 3.

6340. QUERCUS ILEX. **Holly oak.**

From Vilmorin-Andrieux & Co., Paris, France. Received April 22, 1901.

6341. CAPPARIS INERMIS. **Caper.**

From Vilmorin-Andrieux & Co., Paris, France. Received April 22, 1901.

A spineless form of caper.

6342. CERATONIA SILIQUA. **Carob.**

From Vilmorin-Andrieux & Co., Paris, France. Received April 22, 1901.

6343. QUERCUS ILEX. **Green truffle oak.**

Obtained through Vilmorin-Andrieux & Co. from Mr. A. Rousseau, Carpentras, Vaucluse, France. Received April 22, 1901.

6344. QUERCUS PUBESCENS. **White truffle oak.**

Obtained through Vilmorin-Andrieux & Co. from Mr. A. Rousseau, Carpentras, Vaucluse, France. Received April 22, 1901.

6345. QUEBRACHIA LORENTZII. **Quebracho colorado.**

From Ronaldo Tidblom, director of agriculture and animal industry, Buenos Ayres, Argentina. Received April 22, 1901.

From the semidesert territories of Chaco and Formosa.

6346. ASPIDOSPERMA QUEBRACHO-BLANCO. **Quebracho blanco.**

Presented by Ronaldo Tidblom, director of agriculture and animal industry, Buenos Ayres, Argentina. Received April 22, 1901.

From the semidesert territories of Chaco and Formosa. The name given by Sig. Tidblom was *A. quebracho* Schlect., which does not appear in the Kew Index.

6347. VACCINIUM VITIS-IDAEA. **Mountain cranberry.**

Presented by Prof. Theodor Erben, of the agricultural-botanical experiment station of Tabor, Bohemia. Received April 25, 1901.

6348. RUBUS IDAEUS. **Raspberry.**

Obtained from France by Mr. G. B. Brackett, Pomologist, U. S. Department of Agriculture.

"This belongs to the *R. idaeus* group. The plant is a strong, upright grower, everbearing in its habit. The fruit is large, red, and of excellent quality. It ripens from July to December." (*Brackett.*)

6349. PISTACIA VERA. **Pistache.**

From Athens, Greece. Received through Mr. D. G. Fairchild (No. 569, March 3, 1901), April 27, 1901.

Female trees. Three-year-old trees budded the winter of 1900–1901 and the preceding winter.

"The pistache is a valuable nut tree, well suited for culture in regions having a hot, dry climate. The nuts sell in this country from 40 cents to $1.25 a pound, wholesale. They are already extensively used in America for flavoring confectionery and ice creams, and it is confidently expected that they will be widely used as a table nut, to be served like the almond, as soon as they become better known. In the eastern Mediterranean countries, where the pistache is the best known and choicest nut, it is much more used for eating from the hand than for flavoring. These nuts are among the most delicious known, rather smaller than the almond, but more delicate in flavor and a little oilier, somewhat resembling in texture and taste the piñon of the Rocky Mountains. Unlike the piñon and almond, the pistache nut has a shell easily opened with the fingers, since it contains two thin valves, which split open and become nearly separated as the fruit dries.

"The sorts having yellow kernels are most used in oriental countries as a nut to eat from the hand, but the green sorts only are in demand for flavoring, since the public has become accustomed to associating this color with pistaches used for this purpose.

The pistache is a small tree, 15 to 30 feet high, belonging to the same family as the sumac (*Anacardiaceae*). The male and female flowers are borne on different trees, and this necessitates securing both kinds of trees for an orchard, or, what is preferable, that scions of the male sort be grafted on the female trees that bear the fruit. One male tree is said to suffice to pollinate from five to ten female trees. The best method of propagation is to graft the pistache on the terebinth tree (*Pistacia terebinthus*), a near relative of the pistache, native of the Mediterranean countries where the pistache is cultivated. It is preferable to grow the terebinth trees from seed in place in the orchard, but they can be transplanted, if necessary. The present importation comprises three-year-old trees which were grafted in nursery rows and dug up early in March.

"The pistache will endure a temperature of from 10° to 20° F. It is about as hardy as the fig and olive, possibly rather hardier. Its crop is not so liable as that of the almond to injury by late frosts, because it flowers much later in spring, a matter of great importance in the Southwest, where the almond is often injured because of its habit of blooming early. The pistache thrives best on a deep soil containing lime, but it succeeds also on other soils. A warm southern hillside is the best location. The tree is adapted especially for culture in regions having a dry summer season. It requires about the same climate as the olive, and will doubtless succeed in parts of California, Arizona, and possibly in some regions in Florida. Around the shores of the Mediterranean, where it is commonly cultivated, the tree is not irrigated. It needs about as much water as the olive, and, like it, can succeed on hillsides too dry to support most other fruit trees.

"The trees comprised under this number are female trees, and should be planted 20 to 25 feet apart, with a male tree (No. 6350) in the center of the group of females. The grafts should be cut back to two buds. The trees should be watered judiciously this season until properly started, after which no special care is necessary. Although these trees are already older than is desirable for transplanting, it is hoped that by care they can all be made to live, and that a small quantity of nuts will be produced year after next. The trees will bear full crops when they are 7 years old. The average yield is about 20 pounds." (*W. T. Swingle and D. G. Fairchild.*)

6350. PISTACIA VERA. **Pistache.**

From Athens, Greece. Received through Mr. D. G. Fairchild (No. 569, March 8, 1901), April 27, 1901.

Male trees. "Three-year-old stocks budded 1899–1900 to male scions." (*Fairchild.*)

6351. NEOWASHINGTONIA FILAMENTOSA. **Fan palm.**

Received March, 1901, through Prof. Charles H. Shinn, from Johnson & Musser Seed Company, Los Angeles, Cal.

6352. ERYTHEA EDULIS. **Guadalupe palm.**

Received March, 1901, through Prof. Charles H. Shinn, from Johnson & Musser Seed Company, Los Angeles, Cal.

6353. HUMULUS LUPULUS. **Hop.**

From Horst Brothers, Horstville, Cal. Received April 25, 1901.

A collection of American varieties.

6354. JUGLANS REGIA. **Walnut.**

From Karpenisi, Greece. Presented by Mr. Xanthopoulo, of the Agricultural Experiment Station of Patras, Greece, through Mr. D. G. Fairchild (No. 568, March, 1901). Received April 27, 1901.

"Plants of a very large, thin-shelled walnut which grows in the mountains of Karpenisi, Southern Thessaly. I did not see specimens of this nut, but heard that an unusually large one from one of these trees was sent to the Paris Exposition of 1898. It was so thin shelled that it was necessary to pack it in cotton. Mr. Xanthopoulo, who secured the plants, says he took them from the original trees in Karpenisi which bore the giant nuts sent to Paris." (*Fairchild.*)

6355. PISTACIA sp. **Pistache.**

From Athens, Greece. Received through Mr. D. G. Fairchild, April 27, 1901.

Stocks originally budded with the pistache (No. 6349), of which the scions died in transit. To be used as stocks upon which to graft the true pistache.

6356. Vitis sp. **Grape.**

Received, through Mr. G. B. Brackett, Pomologist, U. S. Department of Agriculture, from Matthew Crawford, Cuyahoga Falls, Ohio, April 29, 1901.

6357. Ficus carica. **Fig.**

From T. S. Williams, Monetta, S. C. Received April 29, 1901.

6358. Pyrus baccata. **Siberian crab apple.**

From Troitzkosavsk, Altai Province, Siberia. Received, through A. Fischer von Waldheim, director of Imperial Botanic Gardens, St. Petersburg, Russia, April 30, 1901.

This was marked "*Pyrus baccata genuina.*"

6359. Beta vulgaris. **Sugar beet.**

Grown in Friedrichswerth, Germany, by Ed. Meyer. Presented by Beet Sugar Gazette Co., Chicago, Ill., April 29, 1901.

Friedrichswerther Elite.

6360. Citrus limonum. **Lemon.**

From Poros Island, Greece. Received through Mr. D. G. Fairchild (No. 576), April 27, 1901.

"One of the best varieties of Poros lemons, which are noted in Greece as the finest coming to the Athens market. The scions are from trees that often bear nearly or quite seedless fruits." (*Fairchild.*)

6361. Citrus sp.

From Canné, Crete. Received through Mr. D. G. Fairchild (No. 580, March 14, 1901), April 27, 1901.

"Grafting wood of a remarkable citrous fruit, which resembles in shape a large, somewhat pear-shaped lemon. It is Australian gold in color, with a soft, rather thin skin and a flesh as dark colored as some oranges and of a remarkably agreeable, very mild acid, slightly bitter taste. In resembles in flavor a pomelo, only it is somewhat milder. Altogether a most refreshing fruit and deserving the serious attention of all pomelo and other citrus growers. It is possibly a cross or result of several crosses, including the orange, bergamot, and lemon. There are a few weak spines, the leaf has a winged petiole, and the fruit is borne on long, swinging fruit stalks. The name *lemon pomelo* is suggested because it is shaped like a lemon and tastes something like a pomelo. There is no popular name here in Crete. It is probable, in fact, that there are not more than a half dozen trees in existence on the island." (*Fairchild.*)

6362. Cydonia sinensis. **Chinese quince.**

From Zante, Greece. Received through Mr. D. G. Fairchild, April 27, 1901.

Seeds of No. 6183.

6363. Cucumis melo. **Melon.**

From Zante, Greece. Received through Mr. D. G. Fairchild (No. 567, February 22, 1901), April 27, 1901.

Zante winter. "This is said to be the best of the winter melons of Zante, having a delicious sweet flavor and keeping until the opening of spring. It is cultivated like any ordinary melon, plucked before frost in autumn, and allowed to ripen in a cool place free from frost. In Zante the fruits are hung up to ripen in small fiber slings on the wall. A specimen was tasted by the writer on the 22d of February, and although it was somewhat lacking in sweetness proved a most palatable fruit. Good melon connoisseurs say that these winter melons from Zante are often deliciously sweet, even when kept until spring." (*Fairchild.*)

6364. CUCUMIS MELO. **Winter melon.**

From Zante, Greece. Received through Mr. D. G. Fairchild (No. 566, February 22, 1901), April 27, 1901.

Cephalonia. "A winter canteloupe, which is grown to perfection on the island of Cephalonia, one of the Ionian group. The melons are cultivated in the usual way and in autumn plucked and strung up in a primitive basket of rough twisted grass. Here they are left to ripen and from midwinter until April the inhabitants of both Cephalonia and Zante serve them on their tables. These winter melons have a thin rind, which is loosely attached to the flesh and can be peeled off like the skin of an orange, leaving the most beautiful ice-cream-like, greenish flesh behind. I know of no more beautiful table fruit than a half melon peeled and served in this way. It looks like a mound of pistache ice cream and would captivate any fruit lover." (*Fairchild.*)

6365. CITRUS LIMONUM. **Lemon.**

From Andros Island, Greece. Received through Mr. D. G. Fairchild, April 27, 1901.

Seed from fruits which are nearly seedless.

6366. VITIS VINIFERA. **Corinth.**

From region of Nemeo, Greece. Received through Mr. D. G. Fairchild, April 27, 1901.

Corinth. "Among the clusters of ordinary dried *Corinths*, which are usually seedless, there are generally small branches bearing larger berries. These berries have often one or more seeds in them. These seeds were taken from such berries. It may be possible, by the use of such seeds, to produce new seedless varieties." (*Fairchild.*)

6367. HORDEUM DISTICHUM ERECTUM. **Barley.**

From Patras, Greece. Received through Mr. D. G. Fairchild, April 27, 1901.

6368. MEDICAGO sp.

From mountains of Corfu, Greece. Received through Mr. D. G. Fairchild (No. 537), April 27, 1901.

"One of the numerous leguminous fodder plants which grow rankly on the island and form a large part of the excellent Corfu hay. Procured through the assistance of Mr. Antonio Collas." (*Fairchild.*)

6369. TRITICUM VULGARE. **Wheat.**

From Trieste, Austria. Received through Mr. D. G. Fairchild, April 27, 1901.

Riete Originario. "A noted winter variety, said to be resistant and a good yielder. Grown in the vicinity of Görz and Trieste, Austria." (*Fairchild.*)

6370. TRITICUM VULGARE. **Wheat.**

From Greece. Received through Mr. D. G. Fairchild, April 27, 1901.

Cologna. "A winter variety." (*Fairchild.*)

6371. TRITICUM DURUM. **Wheat.**

From Corfu, Greece. Received through Mr. D. G. Fairchild, April 27, 1901.

Sample only.

6372. TRITICUM POLONICUM? **Wheat.**

From Corfu, Greece. Received through Mr. D. G. Fairchild, April 27, 1901.

"Sample only; probably of Russian origin." (*Fairchild.*)

6373. TRITICUM VULGARE. **Wheat.**

From Greece. Received through Mr. D. G. Fairchild, April 27, 1901.

Sample only, labeled *Jucente* (?).

6374. VITIS VINIFERA. **Corinth.**

From Patras, Greece. Received through Mr. D. G. Fairchild from Cremidi Brothers, of Patras, Greece. Received April 27, 1901.

Corinth. "Large berries containing seeds. These large berries are produced, I am told, occasionally by certain branches of the plant which otherwise bear only seedless fruit. They have often many seeds in them. New varieties of the *Corinth* grape are likely to originate as seedlings from this generally seedless variety." (*Fairchild.*)

6375. NIGELLA AROMATICA. **Fennel flower.**

Grown on the Potomac Flats, District of Columbia, under the direction of W. R. Beattie, from No. 2129.

6376. HIBISCUS ESCULENTUS. **Okra.**

Grown on the Potomac Flats, District of Columbia, under the direction of W. R. Beattie, from No. 3636.

6377. DOLICHOS LABLAB. **Lablab bean.**

Grown on the Potomac Flats, District of Columbia, under the direction of W. R. Beattie, from No. 2083.

6378. PHASEOLUS MUNGO. **Gram.**

Grown on the Potomac Flats, District of Columbia, under the direction of W. R. Beattie, from No. 3868.

6379. GLYCINE HISPIDA. **Soy bean.**

Grown on the Potomac Flats, District of Columbia, under the direction of W. R. Beattie, from No. 3870.

6380. MEDICAGO TURBINATA. **Bur clover.**

Grown on the Potomac Flats, District of Columbia, under the direction of W. R. Beattie, from No. 4187.

6381. OCIMUM BASILICUM. **Sweet basil.**

Grown on the Potomac Flats, District of Columbia, under the direction of W. R. Beattie, from No. 2008.

6382. CAPSICUM ANNUUM. **Red pepper.**

Grown on the Potomac Flats, District of Columbia, under the direction of W. R. Beattie, from No. 3905.

A sweet pepper.

6383. CAPSICUM ANNUUM. **Red pepper.**

From Athens, Greece. Received through Mr. D. G. Fairchild, April 27, 1901.

"A market variety in Athens." (*Fairchild.*)

6384 to 6424.

From Pyeng Yang, Korea. A collection of seeds of economic plants which are cultivated in Korea. Presented by Rev. W. M. Baird. Received May 3, 1901.

6384. ORYZA SATIVA. **Black rice.**

"Plant in May." (*Baird.*)

6385. FAGOPYRUM ESCULENTUM. **Buckwheat.**

6386. GLYCINE HISPIDA. **Soy bean.**

Black.

6384 to 6424—Continued.

6387. CALLISTEPHUS HORTENSIS. **China aster.**

Red.

6388. CALLISTEPHUS HORTENSIS. **China aster.**

White.

6389. CHAETOCHLOA ITALICA. **Millet.**

6390. ALLIUM CEPA. **Onion.**

6391. PHASEOLUS sp. **Bean.**

6392. CALLISTEPHUS HORTENSIS. **China aster.**

Red.

6393. PERILLA sp.?

"A fine oil for the table is extracted from the seeds. Sow in April or May." (*Baird.*)

6394. BRASSICA JUNCEA. **Chinese mustard.**

"Plant in April." (*Baird.*)

6395. CUCUMIS SATIVA. **Cucumber.**

"Plant in April or May." (*Baird.*)

6396. GLYCINE HISPIDA. **Soy bean.**

White.

6397. GLYCINE HISPIDA. **Soy bean.**

6398. RAPHANUS SATIVUS. **Radish.**

Large. "Plant in August." (*Baird.*)

6399. HORDEUM VULGARE. **Barley.**

Late.

6400. GOSSYPIUM BARBADENSE. **Cotton.**

"Plant in May." (*Baird.*)

6401. ZEA MAYS. **Corn.**

Late. "Plant in April or May." (*Baird.*)

6402. CUCURBITA PEPO. **Pumpkin.**

April.

6403. HORDEUM VULGARE. **Barley.**

"A hull-less variety." (*Baird.*)

6404. ZOYSIA PUNGENS. **Korean lawn grass.**

Used in Korea for lawns.

6405. ZOYSIA PUNGENS. **Korean lawn grass.**

Used in Korea for lawns.

6406. ANDROPOGON SORGHUM. **Sorghum.**

"A kind of grain similar in appearance to broom corn or sugar cane. The seeds are eaten. The canes are very straight and quite useful. Planted in May." (*Baird.*)

6384 to 6424—Continued.

6407. Coix sp. **Job's tears.**

6408. Panicum miliaceum. **Broom-corn millet.**

6409. Panicum crus-galli. **Barnyard grass.**

6410. Chaetochloa italica. **Foxtail millet.**

6411. Andropogon sorghum. **Sorghum.**

"Kind of grain similar in appearance to broom corn and sugar cane. The grain is eaten by Koreans. The canes are straight and valuable." (*Baird.*)

6412. Lagenaria vulgaris. **Gourd.**

6413. Vigna catjang. **Cowpea.**

6414. Glycine hispida. **Soy bean.**

"Plant in May." (*Baird.*)

6415. Phaseolus sp. **Bean.**

Black.

6416. Glycine hispida. **Soy bean.**

Black.

6417. Phaseolus mungo-radiatus (?). **Gram.**

6418. Phaseolus mungo-radiatus (?). **Gram.**

6419. Chrysanthemum carinatum.

"Very good greens for dressing with salad oil are prepared from this." (*Baird.*)

6420. Sesamum indicum. **Sesame.**

"An oil is extracted from the seeds which is useful for oiling furniture, etc." (*Baird.*)

6421. Impatiens balsamina. **Balsam.**

6422. Celosia cristata. **Cockscomb.**

6423. Zinnia elegans. **Zinnia.**

6424. Tagetes sp. **Marigold.**

6425 to 6428.

From Stockholm, Sweden. Received through Messrs. Lathrop and Fairchild (Nos. 419, 420, 422, 423) from Lindahls Fröhandel, May 6, 1901.

A collection of vegetable seeds as follows:

6425. Cucumis sativus. **Cucumber.**

Stockholm's Torg. "The most popular cucumber in Sweden, suitable for planting in Alaska. It is a white, very hardy variety, though said to be inferior to green sorts." (*Fairchild.*)

6426. Cucumis melo. **Muskmelon.**

Stockholm's Torg. "The best Swedish market variety of cantaloupe. It is here cultivated under glass, and the melons are sold for 2 to 4 kroner, or 50 cents to $1 apiece." (*Fairchild.*)

6425 to 6428—Continued.

6427. Brassica oleracea. **Cabbage.**

Stockholm's Torg. "A native variety of Swedish cabbage, said to be a very early maturing sort. For planting in Alaska." (*Fairchild.*)

6428. Pisum sativum. **Pea.**

Stensärter äkta. "An early ripening Swedish pea, suitable for Alaska and other northern localities." (*Fairchild.*)

6429. Vitis vinifera. **Corinth.**

From Panariti, Greece. Received through Mr. D. G. Fairchild (No. 575, March 6, 1901), May 9, 1901.

"The variety of grape producing the *currants* or *corinths* of commerce. These cuttings were purchased in the village of Panariti, which lies among the mountains back of Xyloncastron. This village is noted for producing some of the finest corinths in Greece. It is the custom in Greece to plant very long cuttings in the rocky soil, digging down even into the bed rock, upon which the base of the cutting is allowed to rest. In Greece the vines are planted about 5 feet apart each way, and are trained wholly without a wire or other trellis. The claim is made that the fruit is so delicate, being, as is well known, an essentially seedless grape, that it requires the dense shade made by the foliage of the low sprawling canes which spring from the low-cut, upright, main trunk of the plant. As the clusters mature, these sprawling canes are lifted from the ground and supported on short stakes to prevent the grapes from actually lying on the ground. After the petals have dropped from the flowers, i. e., when the fruit is well 'set,' the vines are ringed or girdled. This girdling is done on the main trunk of the vine, a thin quarter-inch-wide ring of bark being removed. This ringing is said to be essential to the production of a large berry. It is the belief that the berries from vines not ringed are richer in sugar, not so filled with juices, and keep better than those from ringed vines. The climate and soil in which the corinth will thrive are various. Necessary requisites are a long summer with good insolation and a not too high temperature, 95° F. being looked on as a very high temperature in the regions where these plants are cultivated. It is a popular belief that the corinth degenerates rapidly on being introduced into foreign countries, and that it even becomes a seed-bearing grape. I can not find that this belief is supported by sufficient evidence. Samples of corinths grown in Australia show that at least the plant does not produce seed there and does produce a utilizable product, which, however, is inferior in size and flavor to good Greece-grown specimens. The small size may be caused by a neglect to ring or a failure to perform this important process at the proper time, i. e., just after the fruit sets. This variety is exceedingly subject to the downy mildew (*Plasmopara viticola*), and the fields of Greece were ravaged by a frightful epidemic of this disease last year. The immediate locality from which these cuttings came was spared." (*Fairchild.*)

6430. Phaseolus viridissimus. **Gram.**

From Athens, Greece. Received through Mr. D. G. Fairchild (No. 571), May 9, 1901.

"One of the smallest and most delicate beans in the world. The beans are not much larger than grains of rice and of a deep green color. They are said to be most delicious when cooked alone or with rice in the national Greek dish called *Pilaff*. Their culture in Greece is a restricted one and the beans are considered a great delicacy. This is a variety which should receive a thorough distribution, as it is one worthy of trial throughout the south. I am indebted to Prof. Th. de Heldreich, of Athens University, for calling my attention to this species of which he has made a special study. Probably a variety of the *gram* of India (*Phaseolus mungo*)." (*Fairchild.*)

6431. Vigna catjang. **Cowpea.**

From Athens, Greece. Received through Mr. D. G. Fairchild (No. 572, March 7, 1901), May 19, 1901.

"This legume is highly prized by the Greeks, who use it as we do the ordinary bean. (*Fairchild.*)

6432. BRASSICA OLERACEA var. BOTRYTIS. **Cauliflower.**

From Athens, Greece. Received through Mr. D. G. Fairchild (No. 573, March 7, 1901), May 5, 1901.

"An early variety of cauliflower which ripens in December in Greece. Its heads attain most unusual proportions and are of quite unusual flavor. It is sown here in August or September." (*Fairchild.*) (See No. 6434.)

6433. LENS ESCULENTA var. MICROSPERMA. **Lentil.**

From Athens, Greece. Received from Dr. Th. de Heldreich through Mr. D. G. Fairchild (No. 570, March 8, 1901), May 9, 1901.

"A small-seeded, very delicate lentil which was first described by Dr. Th. de Heldreich, the noted explorer of the Grecian flora. (See *Revue des Sciences Naturelles Appliquées 37^e^ Anné No. 15.5 Août 1890. Note sur une variété nouvelle ou peu Connue de Lentille.*) The variety is cultivated on the islands of Cephalonia and Leucade, two of the Ionian group, and differs essentially from the ordinary *Lens esculenta* Mch., having smaller elipsoid, even almost spherical, seeds which possess a marginal border very inconspicuous and obtuse. The color is pale yellow and they vary in diameter from three to five millimeters. Their ordinary lentil is lens shaped, circular, and has a sharply defined margin. This *microsperma* is said to be more tender than the ordinary sorts and much more easily cooked, and the flavor is reported to be superior, lacking that pronounced characteristic taste which makes lentils objectionable to some people. Deserves a thorough trial as a vegetable for soups and purées. A calcareous soil is essential to its cultivation. Stalks make a good fodder." (*Fairchild.*)

6434. BRASSICA OLERACEA var. BOTRYTIS. **Cauliflower.**

From Athens, Greece. Presented by Dr. Th. de Heldreich, of Athens University, through Mr. D. G. Fairchild (No. 574, March 7, 1901). Received May 9, 1901.

"A late variety of Grecian cauliflower which is planted in December and matures in March. Is a monster headed white variety of excellent flavor." (See No. 6432.) (*Fairchild.*)

6435. VICIA ERVILIA.

From Canné, Crete. Received through Mr. D. G. Fairchild (No. 594, March 16, 1901), May 17, 1901.

Orobus. "A forage plant very largely cultivated in the island of Crete. It is sown like any ordinary vetch, and the seeds are fed to the oxen and cattle. Cav. G. M. Fumis, inspector of agriculture at Canné, can secure this in quantity should it prove of sufficient interest." (*Fairchild.*)

6436. LATHYRUS OCHRUS.

From Canné, Crete. Received through Mr. D. G. Fairchild, May 17, 1901.

Vicos. "A forage plant cultivated on the island of Crete." (*Fairchild.*)

6437. VICIA sp.

From Canné, Crete. Received through Mr. D. G. Fairchild, May 17, 1901.

Yares or *Gesu.* "A forage plant cultivated on the island of Crete." (*Fairchild.*)

6438. PHOENIX DACTYLIFERA. **Date.**

From Alexandria, Egypt. Received through Mr. D. G. Fairchild (No. 582, March 30, 1901), May 11, 1901.

Hayani. "This is the earliest sort grown in the Delta region of the Nile and one of the best-known kinds there. It is a red table date, becoming black when ripe; 2 to 2½ inches long; cylindrical. It ripens in September or October. Not used as a drying date. It sells in the season for 2 piasters Turkish (10 cents) per oke (3 pounds). Matures its fruit all at once." (*Fairchild.*)

6439. PHOENIX DACTYLIFERA. **Date.**

From Alexandria, Egypt. Received through Mr. D. G. Fairchild (No. 583, March 30, 1901), May 11, 1901.

Zaglul. "A variety from the Nile Delta region. Fruits of this sort are very large, often 3 inches long. They are eaten by the Arabs when red in color and still unripe. They are table dates, but are not prized as highly by Europeans as by the Arabs, who pay a high price for them. It is a variety which hangs on late in the season." (*Fairchild.*)

6440. PHOENIX DACTYLIFERA. **Date.**

From Alexandria, Egypt. Received through Mr. D. G. Fairchild (No. 584, March 30, 1901), May 11, 1901.

Bint Aisha. "The best variety of table date in lower Egypt, at least it is so considered by many Europeans. It is not a keeping date, being so sweet and sticky that when ripe it must be eaten with a fork. A short, black, small (1½ inches long) date, ripening in December. Skin separates very easily from the flesh. Sells for 10 to 15 cents for three pounds. Stem of mature palm very slender." (*Fairchild.*)

6441. PHOENIX DACTYLIFERA. **Date.**

From Alexandria, Egypt. Received through Mr. D. G. Fairchild (No. 585, March 30, 1901), May 11, 1901.

Samani. "A variety of Delta date; large, yellow, 2 to 2¼ inches long, with a thick skin; ripening in November. It is used in making preserves, which are manufactured especially well by a Mr. Tambaco, of Alexandria, who puts them in tin cans for export after they have been stewed in sugar. They must be peeled before canning, as the skin is tough. Thought of very highly by many Europeans as a sweet characteristic preserve. Is also canned with little sugar, as Americans can plums." (*Fairchild.*)

6442. PHOENIX DACTYLIFERA. **Date.**

From Alexandria, Egypt. Received through Mr. D. G. Fairchild (No. 586, March 30, 1901), May 11, 1901.

Dakar Majahel. "A male variety which is used in the Delta for fertilizing purposes. All the varieties, of which there are at least eight in the region of Ramley alone, are fertilized with the pollen of this *Dakar Majahel.* It is claimed to be the only sort that can be used on all these eight varieties." (*Fairchild.*)

6443. ALBIZZIA LEBBEK **Lebbek.**

From Cairo, Egypt. Received through Mr. D. G. Fairchild (No. 611, April 18, 1901), May 17, 1901.

"A much used shade tree about Cairo. Owing to the inroads of a borer, however, this species is being gradually replaced in Egypt by other forms such as *Ficus nitida.*" (*Fairchild.*)

6444. KIGELIA PINNATA (?). **Sausage tree.**

From Cairo, Egypt. Received through Mr. D. G. Fairchild (No. 612, April 18, 1901), May 17, 1901.

"This sausage tree is not only a very curious species, bearing its flowers and fruit on long pendant pedicels, but it is a foliage and landscape tree of great merit, worthy of introduction into the parks of southern Florida. Its foliage is exceedingly hard and harsh and very brittle and its heavy sausage-shaped fruits are so heavy as to be dangerous when they fall from the tree. In the Ezbekieh Gardens in Cairo a beautiful specimen of this tree is to be seen." (*Fairchild.*)

6445. PHOENIX DACTYLIFERA. **Date.**

From Charkia, Cairo, Egypt. Received through Mr. D. G. Fairchild (No. 606), May 17, 1901.

Amri (fruit bought on the market). "This sort is known as the best drying date in Egypt. It is in its prime in November but keeps until May or June. A large, red date with a dry, though not unpleasant taste. Some of the specimens are two inches long. Skin rather tough and in most respects inferior to Algerian varieties. These seeds are from trees probably pollinated by some other variety, so they may not yield true *Amri* seedlings." (*Fairchild.*)

6446. ELETTARIA CARDAMOMUM. **Cardamom.**

From Heneratgoda, Ceylon. Received from J. P. William & Bros., May 17, 1901.

Malabar. "In planting cardamons, nursery beds should be prepared about 3 feet wide and 6 feet long; if the soil is poor, cow-dung manure or vegetable mold should be mixed with it (half soil and half manure). Sow the seed, covering it lightly with soil, give the young plants shade, and water them regularly once every evening. Seeds will germinate in from six to eight weeks or possibly not for twelve weeks. When the seedlings are 4 to 6 inches high they should be removed to another bed and planted about 6 to 8 inches apart. When they attain 1 to 2 feet high they are ready to plant in the field about 6 to 12 feet apart, according to the nature of the soil, and should be planted in rainy weather. In planting, the bulb of the plant only should be covered and not the stem; in poor soils, holes are necessary about 1 foot deep and 1½ feet wide which are filled with surface soil, mixed with cow-dung manure or vegetable mold. Care should be taken to keep the nursery thoroughly free from weeds." (*William.*)

6447. ERYTHROXYLON COCA. **Coca.**

From Heneratgoda, Ceylon. Received through J. P. William & Bros., May 17, 1901.

Huanuco. "This plant is a native of tropical South America; it thrives from the sea level up to 5,000 feet and over. The large leaved *Huanuco* variety is especially suited to elevations from 2,000 feet and upward." (*William.*)

6448. CROTON TIGLIUM. **Croton oil tree.**

From Heneratgoda, Ceylon. Received through J. P. William & Bros., May 17, 1901.

"This tree grows even in the poorest soil or abandoned coffee plantations from the sea level up to 3,000 feet and over. Once a week a coolie shakes the tree and picks up from the ground what pods have fallen off, then drops the pods in the sun, shells them, and gives another drying, which is all that is required. A net profit of about 1 shilling a tree per annum has been realized from full-grown trees." (*William.*)

6449. SANTALUM ALBUM. **Sandalwood.**

From Heneratgoda, Ceylon. Received through J. P. William & Bros., May 17, 1901.

"This tree yields the sandalwood of commerce. The same tree produces both the white and yellow sandalwood, the last being the inner part of the tree and very hard and fragrant, especially near the roots. The tree grows from sea level up to 5,000 feet on red and stony soils, and among rocks where the soil is good. The principal item of forest revenue in Mysore is sandalwood. The export to Europe and other countries is yearly increasing." (*William.*)

6450. ALEURITES TRILOBA. **Candle nut.**

From Heneratgoda, Ceylon. Received through J. P. William & Bros., May 17, 1901.

"Oil from the large seeds of this tree is much used for lamps under the name of 'Kekuna' oil; also in painting as a drying oil. In the manufacture of soap it replaces cocoanut oil at Othahiti. The cultivation is easy, the culture being possible from the sea level up to 2,000 feet altitude." (*William.*)

6451. ARTOCARPUS INTEGRIFOLIA. **Honey Jack.**

From Heneratgoda, Ceylon. Received through J. P. William & Bros., May 17, 1901.

"The fruits of this tree, including the seeds, are used as food in various ways, and are highly esteemed by the natives. The fruits weigh as much as 100 pounds. The timber is largely used for all kinds of furniture and building purposes. It is also largely exported to Europe. A full-grown old tree is worth £5 and upward. This is one of the best shade trees for coffee, cocoa, and cardamons, and from the sea level up to 2,000 feet its fallen leaves enrich the soil. The demand for jackwood timber is yearly increasing, as well as the price. Leaves are excellent fodder for cattle, goats, and sheep." (*William.*)

6452. SAPINDUS TRIFOLIATUS.

From Heneratgoda, Ceylon. Received through J. P. William & Bros., May 17, 1901.

6453 to 6460. ERIOBOTRYA JAPONICA. **Loquat.**

From Mustapha Supérieur, near Algiers, Algeria. Presented by Rev. Ewyn Arkwright, from Villa Thémely, through W. T. Swingle. Scions obtained in June, 1900. Grafted trees shipped April 13, 1901; received May 18, 1901.

"This valuable collection of loquats comprises most of the large sorts which have originated in Algeria, where much attention has been paid recently to this valuable fruit. Single fruits of some of these varieties weighed 59 grams, or something over two ounces. There are differences in the time of ripening as well as in the size and flavor of these varieties." (*Swingle.*)

6453.

Don Carlos.

6454.

Baronne Hall.

6455.

St. Michel, long.

6456.

Marcadal.

6457.

Olivier.

6458.

Scala.

6459.

St. Michel, round.

6460.

Narbonne.

6461 to 6468. FICUS CARICA. **Fig.**

From Rouïba, Algeria. Presented by Dr. L. Trabut, Government Botanist, through Messrs. W. T. Swingle and C. S. Scofield. Received May 17, 1901.

"This collection embraces the principal varieties of figs which are grown at Damascus, and was secured by the French consul there on February 14, 1895. They were sent to Dr. L. Trabut, Government Botanist, Algeria, who planted them at Rouïba in March, 1895. The original notes which accompanied the varieties and which, presumably, were prepared by the French consul are given under each of the numbers." (*Swingle.*)

6461.

Kaab el Ghazal. Fruit medium size, white, yellow outside, of the color of honey inside, splitting open when ripe.

6462.

Sultani. Fruit large, yellow outside, red inside, splitting open at maturity. An early variety.

6463.

Mamari (labeled *Mennoni*, probably erroneously). Fruit medium size, yellow outside, red inside, splitting open when ripe. A late variety.

6464.

Malaki blanc. Fruit large, yellow, white outside, red inside; does not split open when ripe.

6461 to 6468—Continued.

6465.

Sultanie. Grows on dry lands. Fruit medium size, yellow outside, white inside, splitting open when ripe.

6466.

Malaki (labeled *Masaki*, probably erroneously). Fruit large, yellow outside, honey colored inside, splitting open when ripe.

6467.

Baalie. Fruit small, green outside, red inside; does not split open when ripe.

6468.

Hamari. This variety is not included in the descriptive list of varieties furnished by the French consul to Dr. Trabut.

6469 to 6471. FICUS CARICA. **Fig**

From Kabylia, Algeria. Presented by Dr. L. Trabut, Government Botanist, through Messrs. W. T. Swingle and C. S. Scofield. Received May 17, 1901.

6469.

Abakour amellal (*early white*). "A fig from Kabylia, a good fig-growing region, said to produce two crops a year, brebas and figs." (*Swingle and Scofield.*)

6470.

Aberkan (*black*). "A fig from Kabylia, a good fig-growing region, said to produce two crops a year, brebas and figs." (*Swingle and Scofield.*)

6471.

Yousef blanche. "A fig from Kabylia found by General Yousef at time of conquest, 1830–45." (*Swingle and Scofield.*)

6472. FICUS CARICA. **Fig.**

From Rouïba, Algeria. Presented by Dr. L. Trabut, Government Botanist, through Messrs. W. T. Swingle and C. S. Scofield. Received May 17, 1901.

Figuier de Smyrne. "An unnamed Smyrna fig obtained by Doctor Trabut through the French consul some years ago. (*Swingle and Scofield.*)

6473. FICUS CARICA. **Caprifig.**

From Rouïba, Algeria. Presented by Dr. L. Trabut, Government Botanist, through Messrs. W. T. Swingle and C. S. Scofield. Received May 17, 1901.

"A wild caprifig having short flat fruits." (*Scofield.*)

6474. FICUS CARICA. **Caprifig.**

From Rouïba, Algeria. Presented by Dr. L. Trabut, Government Botanist, through Messrs. W. T. Swingle and C. S. Scofield. Received May 17, 1901.

"A wild caprifig having long fruits." (*Scofield.*)

6475. FICUS CARICA. **Caprifig.**

From Algiers, Algeria. Received through Mr. C. S. Scofield, May 17, 1901.

Hamma. "A very valuable variety growing by a stone quarry above the Jardin d'Essai du Hamma, near Algiers. Bears large quantities of winter-generation caprifigs (*mamme*). It is probably from this tree that the Blastophaga was introduced into California in 1899. It bears abundant profichi also." (*Swingle.*)

6476. Ficus carica. **Caprifig.**

From Algiers, Algeria. Received through Mr. C. S. Scofield, May 17, 1901.

"Growing at the stone quarry above Jardin d'Essai du Hamma, near Algiers. Did not hold winter fruits well." (*Scofield.*)

6477. Ficus carica. **Caprifig.**

From Biskra, Algeria. Obtained by Mr. W. T. Swingle, May 15, 1900. Grown one year at Algiers. Received May 17, 1901.

Laudi (?). "Cuttings from tree in a garden in old Biskra." (*Swingle.*)

6478. Ficus carica. **Caprifig.**

From Chetma oasis, near Biskra, Algeria. Obtained by Mr. W. T. Swingle, May 14, 1900. Grown one year at Algiers. Received May 17, 1901.

Bsikri. "Cuttings from a tree in a garden." (*Swingle.*)

6479. Ficus carica. **Caprifig.**

From Biskra, Algeria. Obtained by Mr. W. T. Swingle, May 15, 1900. Grown one year at Algiers. Received May 17, 1901.

Bsikri. "Cuttings from a tree in garden in Old Biskra." (*Swingle.*)

6480. Ficus carica. **Fig.**

From Biskra, Algeria. Obtained by Mr. W. T. Swingle, May 15, 1900. Grown one year at Algiers. Received May 17, 1901.

Choer. "Cuttings from a fig tree growing in the road running south along the west side of Biskra oasis. Probably of no great value." (*Swingle.*)

6481. Ficus carica. **Caprifig.**

From Algiers, Algeria. Presented by Dr. L. Trabut, Government Botanist, through Messrs. W. T. Swingle and C. S. Scofield. Received May 17, 1901.

Hamma. The same as No. 6475.

6482. Ficus carica. **Caprifig.**

From Algiers, Algeria. Presented by Dr. L. Trabut, Government Botanist, through Messrs. W. T. Swingle and C. S. Scofield. Received May 17, 1901.

Wild fig, with entire leaves from stone quarry above the Jardin d'Essai du Hamma, near Algiers.

6483. Ficus carica. **Caprifig.**

From Algiers, Algeria. Presented by Dr. L. Trabut, Government Botanist, through Messrs. W. T. Swingle and C. S. Scofield. Received May 17, 1901.

"A variety of caprifig from M. Eymes de Cheffi." (*Swingle and Scofield.*)

6484. Ficus carica. **Caprifig.**

From Algiers, Algeria. Presented by Dr. L. Trabut, Government Botanist, through Messrs. W. T. Swingle and C. S. Scofield. Received May 17, 1901.

Sultani. The same as No. 6462.

6485. Ficus carica. **Caprifig.**

From Algiers, Algeria. Presented by Dr. L. Trabut, Government Botanist, through Messrs. W. T. Swingle and C. S. Scofield. Received May 17, 1901.

Yousouf blanche. The same as No. 6471.

6486. Ficus carica. **Caprifig.**

From Algiers, Algeria. Presented by Dr. L. Trabut, Government Botanist, through Messrs. W. T. Swingle and C. S. Scofield. Received May 17, 1901.

Hamari. The same as No. 6468.

6487. Ficus carica. **Caprifig.**

From Algiers, Algeria. Presented by Dr. L. Trabut, Government Botanist, through Messrs. W. T. Swingle and C. S. Scofield. Received May 17, 1901.

Belamie.

6488. Ficus carica. **Caprifig.**

From Chetma oasis, near Biskra, Algeria. Obtained by Mr. W. T. Swingle, May 14, 1900. Grown one year at Algiers. Received May 17, 1901.

Booung. "A late sort considered of fourth quality. Cuttings from a tree in a garden." (*Swingle.*)

6489. Ficus carica. **Caprifig.**

From Algiers, Algeria. Presented by Dr. L. Trabut, Government Botanist, through Messrs. W. T. Swingle and C. S. Scofield. Received May 17, 1901.

Figue de l'Archipel (*Archipelago fig*).

6490. Ficus carica. **Caprifig.**

From Algiers, Algeria. Obtained by Mr. W. T. Swingle. Received May 17, 1901.

Bourlier. "A variety much prized by the Kabyle fig growers who come 15 miles or more to Reghaïa to M. Bourlier's farm to get the fruits to use in caprifying figs." (*Swingle.*)

6491. Ficus carica. **Caprifig.**

From Algiers, Algeria. Presented by Dr. L. Trabut, Government Botanist, through Messrs. W. T. Swingle and C. S. Scofield. Received May 17, 1901.

Malaki noir (labeled *Masaki noir*, probably erroneously). Fruit large, violet-colored without, red within, not splitting open at maturity. A late variety.

6492. Iris unguicularis. **Iris.**

From Algiers, Algeria. Presented by Rev. Ewyn Arkwright, through Mr. C. S. Scofield. Received May 17, 1901.

Iris stylosa (*white sport*). "A very handsome white sport of this curious iris (also called *Iris stylosa*), which bears its fruit capsules at or just below the surface of the ground. The flowers have a tube 8 to 12 inches long which serves to support them at the level of the ends of the leaves differing widely from the ordinary species where the tubes are short and the flowers attached to two stems." (*Swingle.*)

6493. Ficus carica. **Fig.**

From Algiers, Algeria. Presented by Dr. L. Trabut, Government Botanist, through Messrs. W. T. Swingle and C. S. Scofield. Received May 17, 1901.

Abakour amclab(?) or *Abacour amclale.*

6494. Ficus sakoui. **Fig.**

From Algiers, Algeria. Presented by Dr. L. Trabut, Government Botanist, through Messrs. W. T. Swingle and C. S. Scofield. Received May 17, 1901.

6495. FICUS CARICA. **Fig.**

From Algiers, Algeria. Presented by Dr. L. Trabut, Government Botanist, through Messrs. W. T. Swingle and C. S. Scofield. Received May 17, 1901.

Abakour aberkan (*early black*).

6496. FICUS CARICA. **Fig.**

From Algiers, Algeria. Presented by Dr. L. Trabut, Government Botanist, through Messrs. W. T. Swingle and C. S. Scofield. Received May 17, 1901.

Yousouf. "A fig from Kabylia, found by General Yousef at the time of the French conquest, 1830–1845." (*Swingle and Scofield.*)

6497. FICUS CARICA. **Fig.**

From Algiers, Algeria. Presented by Dr. L. Trabut, Government Botanist, through Messrs. W. T. Swingle and C. S. Scofield. Received May 17, 1901.

Mamari or *Mennoni.* "An early fig from Damascus obtained by Doctor Trabut through the French consul some years ago." (See No. 6463.) (*Swingle and Scofield.*)

6498. FICUS CARICA. **Fig.**

From Algiers, Algeria. Presented by Dr. L. Trabut, Government Botanist, through Messrs. W. T. Swingle and C. S. Scofield. Received May 17, 1901.

Kaab el ghazal. See No. 6461.

6499. FICUS CARICA. **Fig.**

From Algiers, Algeria. Presented by Dr. L. Trabut, Government Botanist, through Messrs. W. T. Swingle and C. S. Scofield. Received May 17, 1901.

Aberkan or *aberkane.* "A fig from Kabylia, a good fig-growing region, said to produce two crops a year, brebas and figs." (*Swingle and Scofield.*)

6500. VITIS VINIFERA. **Grape.**

From Algiers, Algeria. Presented by Dr. L. Trabut, Government Botanist, through Messrs. W. T. Swingle and C. S. Scofield. Received May 17, 1901.

Sultanie. "A white grape bearing large bunches of fruit suitable for table use or for making a kind of port or Madeira wine." (*Scofield.*)

6501. VITIS VINIFERA. **Grape.**

From Algiers, Algeria. Presented by Dr. L. Trabut, Government Botanist, through Messrs. W. T. Swingle and C. S. Scofield. Received May 17, 1901.

Smyrna seedless raisin.

6502 and 6503.

(Numbers not utilized.)

6504. ACTINIDIA sp.

From Kuling, China. Received through Dr. G. D. Brill (No. 7), May 17, 1901.

"Will grow at an elevation of 3,500 feet and over." (*Brill.*)

6505. VITIS ROMANETI. **Wild grape.**

From Kuling, China. Received through Dr. G. D. Brill (No. 8), May 17, 1901.

"Thorny grape, which bears large clusters of good-sized, black berries." (*Brill.*)

6506.

(Number not utilized.)

6507 to 6646.

From China. Received through Dr. G. D. Brill, May 17, 1901.

A collection of seeds and plants made during an extended trip through China in 1900. The notes regarding the various numbers are copied from letters written during this period, no separate descriptive list of the various introductions having been furnished. Doctor Brill's numbers are given.

6507. PYRUS sp. **Pear.**

From Ichang. "Small and medium, russet colored around the half near the stem. Rest of skin covered with russet dots. Skin coarse, flesh firm." (No. 10.) (*Brill.*)

6508. PYRUS sp. **Pear.**

From Ichang. "Medium sized, drum-shaped, skin yellow and dotted." (No. 11.) (*Brill.*)

6509. PYRUS sp. **Pear.**

From Ichang. (No. 12.)

6510. PYRUS sp. **Pear.**

From Ichang. (No. 13.)

6511. PYRUS sp. **Pear.**

From the vicinity of Ichang. (No. 14.)

6512. PYRUS sp. **Pear.**

From the vicinity of Ichang. (No. 15.)

6513. PYRUS sp. **Pear.**

From the vicinity of Ichang. (No. 16.) "Fruit medium small, skin white to greenish, fruit flattened-round. Flesh dry, quality poor." (*Brill.*)

6514. PYRUS sp. **Pear.**

From the vicinity of Ichang. (No. 17.) "A flat pear, reddish in color." (*Brill.*)

6515. PYRUS sp. **Pear.**

From the vicinity of Ichang. (No. 18.) "Fruit medium small, skin white to greenish, fruit flattened-round. Flesh dry, quality poor." (*Brill.*)

6516. PYRUS sp. **Pear.**

From the vicinity of Ichang. (No. 19.) "Ripens in September; a longer and larger pear than the Kieffer; of similar shape, but smoother; color, rich golden yellow; quality, good; free from woody tissue; very handsome; often weighs 1½ pounds." (*Brill.*)

6517. PYRUS sp. **Pear.**

From the vicinity of Ichang. (No. 20.) "Large, but of poor quality; skin brown-russet color, with corky dots the size of sesame seeds; good baked." (*Brill.*)

6518. PYRUS sp. **Pear.**

From the vicinity of Ichang. (No. 21.) "Very large; cavity at stem deep; coarse flesh." (*Brill.*)

6519. PYRUS sp. **Pear.**

From the vicinity of Ichang. (No. 22.)

6507 to 6646—Continued.

6520. PYRUS sp. **Pear.**

From the vicinity of Ichang. (No. 23.) "Ripens very early; small-medium; flat; color yellow-green; slightly acid." (*Brill.*)

6521. PYRUS sp. **Pear.**

From the vicinity of Ichang. (No. 24.) "Size large; larger around at stem end than blossom end; very sweet and good; texture fine. Chinese say it is 'cooling.'" (*Brill.*)

6522. DIOSPYROS KAKI. **Japanese persimmon.**

From the vicinity of Ichang. (No. 25.) "Small fruited." (*Brill.*)

6523. DIOSPYROS KAKI. **Japanese persimmon.**

From the vicinity of Ichang. (No. 26.) "Large fruited." (*Brill.*)

6524. DIOSPYROS KAKI. **Japanese persimmon.**

From Wuchang. (No. 27.) "Small, rather pointed, red; flesh firm and of good quality, not astringent." (*Brill.*)

6525. DIOSPYROS KAKI. **Japanese persimmon.**

From Wuchang. (No. 28.) "Large, red persimmon, rather pointed. Similar to No. 6524, only three times the size." (*Brill.*)

6526. DIOSPYROS KAKI. **Japanese persimmon.**

From Wuchang. (No. 29.) "Small, yellow; not as good as the red." (*Brill.*)

6527. DIOSPYROS KAKI. **Japanese persimmon.**

From Wuchang. (No. 30.) "Large, flat, ridged, yellow, slightly astringent; has a crease around its greatest diameter as though a string had been tied around it before it was fully ripe." (*Brill.*)

6528. PYRUS sp. **Apple.**

From Wuchang. (No. 31.) "Each tree has buds of three varieties. A soft mealy apple, resembling a Hyslop crab. Of good size and firm flesh. A variety cultivated for flowers." (*Brill.*)

6529. PRUNUS CERASUS. **Cherry.**

From Wuchang. (No. 32.) "Tree small. Fruit rather small, pointed, yellowish-red. Ripens at end of April. Never allowed to attain full size before being picked." (*Brill.*)

6530. CASTANEA sp. **Chestnut.**

From Hankow. (No. 33.) "Propagated by root cuttings. Large nuts. Tree bears very young, at from 5 to 7 feet." (*Brill.*)

6531. PRUNUS sp.

From Ichang. (No. 34.) "Came to me as a peach. Chinese name is for cherry." (*Brill.*)

6532. PYRUS sp. **Pear.**

From the vicinity of Ichang. (No. 35.) "Same as No. 6507." (*Brill.*)

6533. CASTANEA sp. **Chestnut.**

From Ichang. (No. 36.) "Root cuttings of a tree bearing large nuts. Bears early and the tree does not grow large." (*Brill.*)

6534. PRUNUS ARMENIACA. **Apricot.**

From Ichang. (No. 37.) "Large and late." (*Brill.*)

6507 to 6646—Continued.

6535.

(Number not utilized.)

6536. Prunus sp. **Plum.**

From Sai Tseo, above Hankow. (No. 39.) "Pointed, reddish-yellow, sweet; flesh clings to the stone." (*Brill.*)

6537. Prunus sp. **Plum.**

From Ichang. (No. 40.)

6538. Prunus sp. **Plum.**

From Ichang. (No. 41.)

6539. Prunus sp. **Plum.**

From Ichang. (No. 42.)

6540. Prunus sp. **Plum.**

From Sai Tseo, above Hankow. (No. 43.)

6541. Amygdalus persica. **Peach.**

From Sai Tseo, above Hankow. (No. 44.) "Flat, freestone, ripens in May." (*Brill.*)

6542. Amygdalus persica. **Peach.**

From near Sai Tseo, above Hankow. (No. 45.) "White, fine fleshed, flat, freestone, ripening the middle of May." (*Brill.*)

6543. Amygdalus persica. **Peach.**

From Sai Tseo. (No. 46.) "Long, rather pointed, red-fleshed, freestone." (*Brill.*)

6544. Amygdalus persica. **Peach.**

From Sai Tseo. (No. 47.) "Medium size, flat, freestone, ripening in May." (*Brill.*)

6545. Amygdalus persica. **Peach.**

From Sai Tseo. (No. 48.) "Flat, freestone, quality very good. Ripens in June." (*Brill.*)

6546. Prunus sp. **Plum.**

From Sai Tseo. (No. 49.) "Large, round, with deep suture down one side. Flesh, red. Ripens in August." (*Brill.*)

6547. Amygdalus persica. **Peach.**

From Ichang. (No. 50.) "White peach." (*Brill.*)

6548. Amygdalus persica. **Peach.**

From the mountains above Ichang. (No. 50a.)

6549. Zizyphus jujuba. **Chinese date.**

From Ichang. (No. 50a.) "Much used for preserves by drying in sugar or sirup. Also eaten fresh." (*Brill.*)

6550. Vicia faba. **Broad bean.**

From Hankow. (No. 51.) "Large flat bean, a few in a pod. Used for food green and dry. Planted in October or December." (*Brill.*)

6507 to 6646—Continued.

6551. Pisum sativum. **Pea.**

From the valley of Hankow. (No. 52.) "Much resembles the Canadian field pea. Tender ends of shoots, pods, and the peas, green and dry, are used for food." (*Brill.*)

6552. Pisum sativum. **Pea.**

From the mountains near Hankow. (No. 53.)

6553. Vicia sp. (?) **Pea.**

From Ichang. (No. 54.) "Grown 1,000 to 3,000 feet above river. Taller than the others. Much used as food by boat 'trackers.'" (*Brill.*)

6554. Vicia sp. (?)

From Chiu Niu, near Hankow. (No. 55.) "Used as a green manure for rice fields. Sown in October to November and plowed under in April. Larger than No. 6555." (*Brill.*)

6555. Vicia cracca. **Vetch.**

From Wusuel. (No. 56.) "Used especially as a green manure for rice fields. Sown in September to November. Often among the late rice, beans, or buckwheat." (*Brill.*)

6556. Glycine hispida. **Soy bean.**

(No. 57.) "Much used for bean curd and oil all over central China. Probably as many of these are grown as all the other varieties together." (*Brill.*)

6557. Vigna catjang. **Cowpea.**

From Hankow. (No. 58.) "Is ground with water into a paste and pressed into long strings, which are dried and boiled in water." (*Brill.*)

6558. Glycine hispida. **Soy bean.**

From Hankow. (No. 59.) "Used for bean curd and oil. Considered better than No. 6556." (*Brill.*)

6559. Glycine hispida. **Soy bean.**

From beyond Chiu Niu. (No. 60.) "Planted between the rows of rice and ripening late in the fall, after the rice is harvested. Used the same as No. 6556, only quality poorer. Will grow on very wet land." (*Brill.*)

6560. Glycine hispida. **Soy bean.**

From beyond Chiu Niu. (No. 61.) "Planted and used the same as No. 6559. Planted in July or August." (*Brill.*)

6561. Glycine hispida. **Soy bean.**

From Hankow. (No. 62.) "A black bean, used for same purposes as Nos. 6559 and 6560, but of better quality. Not planted with other crops." (*Brill.*)

6562. Phaseolus mungo-radiatus. **Gram.**

(No. 63.) "Planted on the banks of rice fields and in odd corners. Will grow in hard-baked soils. Used in the same way as No. 6557." (*Brill.*)

6563. Vigna catjang. **Cowpea.**

(No. 64.) "Grows to a height of four feet or more. Used for food." (*Brill.*)

6564. Phaseolus mungo. **Gram.**

From Ichang. (No. 65.) "Grows on the mountains between the Indian corn. Largely takes the place of rice; is also cooked with vegetables before fully dry." (*Brill.*)

6507 to 6646—Continued.

6565. PHASEOLUS VULGARIS. **Bean.**

From Ichang. (No. 66.) "A climber. Used as a snap bean." (*Brill.*)

6566. VIGNA CATJANG. **Cowpea.**

From Hankow. (No. 67.) "These peas are often ground to a paste with water and fried in a hot kettle, forming a huge pancake." (*Brill.*)

6567. VIGNA CATJANG. **Cowpea.**

From Hankow. (No. 68.) "Long-podded bush bean. Used almost entirely green as a snap bean. It is planted early in the spring in cold frames after being soaked in water, then transplanted." (*Brill.*)

6568. VIGNA CATJANG. **Cowpea.**

From Hankow. (No. 69.) "Same as No. 6567, except a climber, trained on a trellis." (*Brill.*)

6569. DOLICHOS LABLAB. **Bean.**

(No. 70.) "A great trailer. Usually planted above banks or fences. A profuse bearer of flat pods, which later are used green as snap beans. Late variety." (*Brill.*)

6570. CANAVALIA ENSIFORMIS. **Jack bean.**

(No. 71.) "A great climber; strong grower. Often planted around the houses for shade. Pods over 1 foot long, containing about nine large beans. Pods are cut up and eaten green, and also salted. Beans are very good, but expensive." (*Brill.*)

6571. ASTRAGALUS SINICUS. **Genge clover.**

(No. 72.) "A cloverlike plant, sown from September to December. Plowed under in April as a green manure for rice. Grows to a height of 1½ to 2½ feet. Has many tubercles on the roots and will grow in very wet land. Reseeds itself on the overflowed lands." (*Brill.*)

6572. GYMNOCLADUS CHINENSIS. **Soap tree.**

(No. 73.) "Large tree. The pods are pounded to a paste and used as a soap. They have the smell of rancid butter. Seeds are used as a dye." (*Brill.*)

6573. ZEA MAYS. **Corn.**

From the mountains above Ichang. (No. 74.) "Has been grown there for 200 years or more. Originally from America. Resists drought well. Much used as food." (*Brill.*)

6574. ZEA MAYS. **Corn.**

From the mountains above Ichang. (No. 75.) (Same as No. 6573, except in color.)

6575. ORYZA SATIVA. **Rice.**

From Hankow. (No. 76.) "A glutinous rice, very much like No. 6577. It is planted a little earlier and will ripen in two weeks less time." (*Brill.*)

6576. ORYZA SATIVA. **Rice.**

(No. 77.) "A glutinous rice sown in May and harvested in November. Very productive." (*Brill.*)

6577. ORYZA SATIVA. **Rice.**

(No. 78.) "A glutinous rice with red or brown hulls, which are quite easily separated from the kernels. Rather late in ripening." (*Brill.*)

6507 to 6646—Continued.

6578. Oryza sativa. **Rice.**

(No. 79.) "A glutinous rice, ripening a little earlier than No. 6584. The hull is very thin and gives a large proportion of hulled rice. Hulls very long. Mostly used for making candy." (*Brill.*)

6579. Oryza sativa. **Rice.**

(No. 80.) "A hard rice that does not swell a great deal in cooking. Sown in May, transplanted in June, harvested in September. Hulls thin, giving a large per cent of clean rice." (*Brill.*)

6580. Oryza sativa. **Rice.**

(No. 81.) "A hard rice with long awns and brown, thick chaff." (*Brill.*)

6581. Oryza sativa. **Rice.**

(No. 82.) "A round, short-grained, glutinous rice, with small, compact heads. Ripens a week earlier than No. 6578, or about the middle of July." (*Brill.*)

6582. Oryza sativa. **Rice.**

(No. 83.) "Straw large and coarse. Hull quite thick. Best rice of this section." (*Brill.*)

6583. Oryza sativa. **Rice.**

(No. 84.) "A hard rice; straw short and small, but tough; hulls thin; yields well." (*Brill.*)

6584. Oryza sativa. **Rice.**

(No. 85.) "Grows 3½ to 4 feet high. The seed is sown in March and it is ripe in July. Field is then flooded after harvest and suckers start out which produce a smaller crop in September. Yields heavy crop of good rice. More of this is sown than of any other variety around Hankow." (*Brill.*)

6585. Oryza sativa. **Rice.**

From Ichang. (No. 86.) "A brown-hulled rice." (*Brill.*)

6586. Oryza sativa. **Rice.**

From Ichang. (No. 87.) "It is said to ripen three months from sowing the seed." (*Brill.*)

6587. Oryza sativa. **Rice.**

From Ichang. (No. 88.)

6588. Oryza sativa. **Rice.**

From Shasi. (No. 89.) "A glutinous rice sown on the overflowed lands. The plants are said to stand an excess of water and to keep their heads above it better than any other variety." (*Brill.*)

6589. Chaetochloa italica. **Millet.**

From Sai Tseo. (No. 90.) "Much used by the people as porridge in place of rice in the north of the province." (*Brill.*)

6590. Chaetochloa italica. **Millet.**

From Sai Tseo. (No. 91.) "Used in same way as No. 6589." (*Brill.*)

6591. Chaetochloa italica. **Millet.**

From Ichang. (No. 92.) "Grown in the mountains and much used as a substitute for rice." (*Brill.*)

6507 to 6646—Continued.

6592. Chaetochloa italica. **Millet.**

From Ichang. (No. 93.) "Has the same use as No. 6591, but is said to be of a different variety." (*Brill.*)

6593. Chaetochloa italica. **Millet.**

From Ichang. (No. 94.) "Said to be more glutinous than Nos. 6591 and 6592." (*Brill.*)

6594. Chaetochloa italica. **Millet.**

From the plains above Hankow. (No. 95.)

6595. Sesamum indicum. **Sesame.**

From Hankow. (No. 96.) "Black variety, much used for oil; seeds also used in candy and cake; oil is considered the best of all for cooking." (*Brill.*)

6596. Sesamum indicum. **Sesame.**

(No. 97.) "White variety, used the same as No. 6595, but grown in much larger quantities. The oil is considered better than any other vegetable oil for cooking. Exported to France and Germany in large quantities." (*Brill.*)

6597. Hordeum vulgare. **Barley.**

From Chiu Niu, near Hankow. (No. 98.) "Boiled with rice or boiled and eaten in place of rice." (*Brill.*)

6598. Triticum vulgare. **Wheat.**

From near Hankow. (No. 99.) "Fish-headed wheat, with small, compact heads." (*Brill.*)

6599. Triticum vulgare. **Wheat.**

From near Hankow. (No. 100.) "Long-headed wheat." (*Brill.*)

6600. Triticum vulgare. **Wheat.**

(No. 101.) "Variety most sown on the plains after the summer overflow of the river." (*Brill.*)

6601. Hordeum vulgare. **Barley.**

From below Hankow. (No. 102.) "Largely used here for feeding horses." (*Brill.*)

6602. Fagopyrum esculentum. **Buckwheat.**

(No. 103.) "Sown in August or September. Said to be different from No. 6603. Called sweet buckwheat." (*Brill.*)

6603. Fagopyrum esculentum. **Buckwheat.**

(No. 104.) "Sown early in the spring and called bitter buckwheat." (*Brill.*)

6604. Andropogon sorghum. **Sorghum.**

From Hankow. (No. 105.) "Grows to a height of 12 feet or more. Planted on land too dry for rice. Used for distilling, and refuse is used for pigs and cattle. In some places used for human food." (*Brill.*)

6605. Raphanus sativus. **Radish.**

From Hankow. (No. 106.) "Sown from September to November. Grows all winter." (*Brill.*)

6507 to 6646—Continued.

6606. Abutilon avicennae. **Chinese hemp.**

From Hankow. (No. 107.) "Much used for the manufacture of rope and coarse bagging. The plant is cut, tied in small bundles, and packed in mud or water for about five days. The bark is then stripped off by hand and washed, and it is then ready for market." (*Brill.*)

6607. Brassica juncea. **Chinese mustard.**

From Wuchang. (No. 108.) "This seed is planted in August or September. Young plants are then transplanted to rows about 1 to 3 feet apart. The best is grown about Wuchang. Flower stalks are cut all winter continuously. They are eaten much like asparagus. Color, purple, but said to change to green after a season or two if the seed is planted in any other place." (*Brill.*)

6608. Hovenia dulcis. **Raisin tree.**

From Hupeh Province. (No. 109.) "Large, handsome tree. The thickened, sweet seed stems are sold on the street, and the Chinese eat them after feasts of wine, saying they prevent the wine from making them drunk." (*Brill.*)

6609. Pterocarya stenoptera. **Wing nut.**

From Hankow. (No. 100a.) "Large, quick-growing, soft-wooded tree, growing along streams. Planted on the Hankow Bend." (*Brill.*)

6610. Brassica pe-tsai. **Chinese cabbage.**

From Hsiang Yang. (No. 102a.) "Best cabbage of central China. Shipped down the river Han to Hankow in large quantities. Its successful growth appears limited to certain localities. Seeds sown late in April, then transplanted. A month before maturity a rice straw is often tied around the head to make it more compact." (*Brill.*)

6611. Brassica pe-tsai. **Chinese cabbage.**

From Hsiang Yang. (No. 103a.) "Same as No. 6610, only a larger variety." (*Brill.*)

6612. Raphanus sativus. **Radish.**

From Sui Chow. (No. 104a.) "Round, globe shaped, smooth, fine red color. Called a turnip by the Chinese and cooked in the same way." (*Brill.*)

6613. Brassica juncea. **Chinese mustard.**

From Sui Chow. (No. 105a.) "Top and root are salted much the same as sauerkraut and sold in all large towns." (*Brill.*)

6614. Brassica juncea. **Chinese mustard.**

(No. 106a.) "Produces very large leaves which are wilted in the sun and then pickled with salt. May be valuable as a food for sheep." (*Brill.*)

6615. Daucus carota. **Carrot.**

(No. 107a.) "Medium long, yellow. Sown in autumn and generally dug all winter." (*Brill.*)

6616. Spinacia oleracea. **Spinach.**

(No. 108a.) "Much used all winter." (*Brill.*)

6617. Chrysanthemum coronarium. **Edible chrysanthemum.**

(No. 109a.) "A plant much used, cooked with other vegetables." (*Brill.*)

6618. Lactuca sativa. **Lettuce.**

(No. 110.) "Stalk becomes much thickened and succulent, and is cooked as a vegetable. Leaves used only by very poor people. Foreign varieties are used around the ports." (*Brill.*)

6507 to 6646—Continued.

6619. ARTEMISIA sp.

(No. 111.) "Used as greens, cooked." (*Brill.*)

6620. CUCURBITA PEPO. **Squash.**

(No. 112.) "Long, green skinned, smooth. Flesh very white. Often weighs 65 pounds or more. Shipped to Hankow in large quantities." (*Brill.*)

6621. CUCURBITA PEPO. **Squash.**

(No. 113.) "Thick, fine skinned, dark yellow, very irregular in shape. Flesh thick, firm, and yellow." (*Brill.*)

6622. BRASSICA JUNCEA. **Chinese mustard.**

(No. 114.) "A large mustard that might have value for sheep food." (*Brill.*)

6623. INDIGOFERA TINCTORIA. **Indigo.**

(No. 115.)

6624. POLYGONUM sp.

(No. 116.) "Very dark color." (*Brill.*)

6625. SAPIUM SEBIFERUM. **Tallow tree.**

From Hankow. (No. 117.) "Seeds used for wax. Coating around the seed much harder than that in it. Tree has hard white wood, even grained. Used for carving, incense, etc. Much of the tallow is exported from Hankow." (*Brill.*)

6626. AVENA sp. **Wild oat.**

(No. 118.) "Grows wild or mixed with barley. Has long awns." (*Brill.*)

6627. RUBUS sp. **Raspberry.**

From Yang Tse Gorges, above Kuei Fu. (No. 119.) "Strong grower, prolific bearer. Fruit red, of good size and good flavor." (*Brill.*)

6628. RUBUS sp. **Raspberry.**

From near Kuling, near Kukiang. (No. 120.) "Said to be good as to size and quality." (*Brill.*)

6629. AMYGDALUS PERSICA. **Peach.**

(No. 121.) "Stones of several varieties." (*Brill.*)

6630. PRUNUS ARMENIACA. **Apricot.**

(No. 122.) "Stones of several varieties." (*Brill.*)

6631. PRUNUS CERASUS (?). **Cherry.**

(No. 123.)

6632. CANNA sp. **Canna.**

From Wau Hsien. (No. 124.) "Growing wild." (*Brill.*)

6633. THEA VIRIDIS. **Tea.**

From Yang To Seng. (No. 125.) "Seed from one of the best tea districts of China." (*Brill.*)

6634. CASTANEA sp. **Chestnut.**

(No. 126.) "Seed mixed, large and medium." (*Brill.*)

6507 to 6646—Continued.

6635. AMYGDALUS PERSICA. **Peach.**

From mountains near Ichang. (No. 127.) "Flowers late, fruit ripens in September. Freestone. Fruit small and quite hairy." (*Brill.*)

6636. CITRUS AURANTIUM. **Orange.**

(No. 128.) "Three varieties of orange seed." (*Brill.*)

6637. BOEHMERIA NIVEA. **Ramie.**

From near Wuchang. (No. 129.)

6638. BOEHMERIA NIVEA. **Ramie.**

From Hunan. (No. 130.) "These roots are from some brought from the best plantations of Hunan for the Viceroy Chang Chi Teng. Hunan is supposed to produce some of the best fiber of China." (*Brill.*)

6639. [Unidentified plant.]

From Loo Ho Ko, on Han River. (No. 131.) "Is cooked much as white potatoes are. Grown from pieces of the root." (*Brill.*)

6640. CITRUS AURANTIUM. **Orange.**

From Ichang. (No. 132.)

6641. CITRUS LIMONUM. **Lemon.**

From Ichang. (No. 133.) "Very juicy, fragrant, full of seeds, large, round, thick-skinned. Used by Chinese as a medicine." (*Brill.*)

6642. CITRUS NOBILIS. **Mandarin orange.**

From Wuchang. (No. 134.) "Medium size, loose-skinned orange, slightly sour." (*Brill.*)

6643. CITRUS MEDICA. **Citron.**

From Wuchang. (No. 135.) "Tight-skinned, round orange." (*Brill.*)

6644. CITRUS NOBILIS. **Mandarin orange.**

From Wuchang. (No. 136.) "Large, loose-skinned." (*Brill.*)

6645. CITRUS DECUMANA. **Pomelo.**

From Ichang. (No. 137.) "Small, white-fleshed."

6646. CITRUS DECUMANA. **Pomelo.**

From Ichang. (No. 138.) "Small, red-fleshed. Considered the best." (*Brill.*)

6647. CITRUS AURANTIUM. **Orange.**

From Corfu, Greece. Presented by Mr. Antonio Colla, through Mr. D. G. Fairchild (No. 533, February 12, 1901). Received May 21, 1901.

"A striking variety of orange which is extremely light in color, and according to Mr. Colla is called in Corfu '*Arancio con pello bianco.*' May be of value for breeders." (*Fairchild.*)

6648. FICUS CARICA. **Fig.**

From Corfu, Greece, Presented by Mr. Antonio Colla through Mr. D. G. Fairchild (No. 536, February 12, 1901). Received May 21, 1901.

"A variety of fig ripening its fruits in February when no leaves are on the tree. The fig is small, but very sweet, and it is very much relished by Europeans in Corfu. It is not a drying fig. Known in Corfu as '*Fico di Febbraio.*'" (*Fairchild.*)

6649. OLEA EUROPAEA. **Olive.**

From Corfu, Greece. Presented by Mr. Antonio Colla through Mr. D. G. Fairchild (No. 535, February 12, 1901). Received May 21, 1901.

"A variety of olive which is said to ripen its fruit in July instead of in October and at the same time to be a heavier yielder than the ordinary sorts grown in Corfu. Called '*Olivo di Estate*,' and I am assured by Mr. Colla, of Corfu, that this variety is known only in a small part of the island of Corfu." (*Fairchild.*)

6650. JUGLANS REGIA. **Walnut.**

From Corfu, Greece. Presented by Mr. Antonio Colla through Mr. D. G. Fairchild (No. 531, February 12, 1901). Received May 21, 1901.

"A very large variety of walnut grown at Paleocastritza, near the town of Corfu. The nut is of quite unusual proportions and the shell is said to be of only medium thickness. The thin skin of the kernel is also said to be less bitter than that of ordinary varieties." (*Fairchild.*)

6651. JUGLANS REGIA. **Walnut.**

From Corfu, Greece. Presented by Mr. Antonio Colla through Mr. D. G. Fairchild (No. 532, February 12, 1901). Received May 21, 1901.

"A variety of walnut having a shell so thin that it splits open of itself as the exocarp or outer covering dries, exposing the kernel within. An interesting house nut, but probably of little commercial value. May, however, be excellent for breeding purposes." (*Fairchild.*)

6652. JUGLANS REGIA. **Walnut.**

From Corfu, Greece. Received May 21, 1901.

(No data.)

6653. LINUM USITATISSIMUM. **Flax.**

From Kafr-el-Zayat, Egypt. Received through Mr. D. G. Fairchild (No. 607, April 18, 1901), May 21, 1901.

"The native Egyptian flax which, according to Mr. Bonaparte's experiments near Cairo, is much inferior to the Belgian imported variety. I can not say positively that this Egyptian variety used by Bonaparte was identical with this seed sent. The stems are long, not blanched near the ground, but of quite miniature and slender size compared with that from Belgian seed. For breeders only." (*Fairchild.*)

6654. CITRUS LIMONUM. **Lemon.**

From Cairo, Egypt. Received through Mr. D. G. Fairchild (No. 608, April 18, 1901), May 21, 1901.

Lemon beledi. "A native Egyptian lemon which is not grafted, but grown from seed. It comes true to seed, or reasonably so at any rate. It is a thin-skinned, very juicy variety and is keenly appreciated in Egypt, although a good Syrian variety is common there. This is valued for its great juiciness and wonderfully prolific character." (*Fairchild.*)

6655. GOSSYPIUM sp. **Cotton.**

From Cairo, Egypt. Received through Mr. D. G. Fairchild, May 21, 1901.

"Samples of a variety said to be growing wild in the Sudan, and also a sample from the Province of Tokar, in the Sudan, grown from seed sent up there from Lower Egypt last year to show the quality of Sudan-grown cotton." (*Fairchild.*)

6656. PYRUS MALUS. **Apple.**

Received through Hunter & Sons, Gosford, New South Wales, May 22, 1901.

Irish Peach.

6657. PAULOWNIA sp.

From China. Received through Dr. G. D. Brill (No. 101), May 17, 1901.

6658. HORDEUM VULGARE. **Barley.**

From the Han River, China. Received through Dr. G. D. Brill (No. 102½), May 17, 1901.

"From up the Han River, where it is used for food in place of rice." (*Brill.*)

6659. ACTINIDIA sp.

From China. Received through Mr. G. D. Brill, May 17, 1901.

6660. CRYPTOMERIA JAPONICA.

From Japan. Received through Tokyo Seed and Plant Company, Yokohama, May 22, 1901.

6661. DALBERGIA SISSOO.

From Cairo, Egypt. Received through Mr. D. G. Fairchild (No. 601, April 18, 1901), May 24, 1901.

"A rapidly growing, hard-wooded tree which is easily propagated by root cuttings. It is a pretty ornamental for warm regions, with delicate foliage of light green, and it is looked upon by the gardener near Cairo, Mr. Stamm, as one of the most promising avenue trees in Egypt. Personally I find that its shade-giving properties are too scanty to recommend it for this purpose. It will do well as a park or garden tree, however. It requires plenty of water and warmth." (*Fairchild.*)

6662. RHAMNUS CALIFORNICA. **Cascara sagrada.**

Presented by Prof. Jos. Burtt Davy, Berkeley, Cal. Received May 27, 1901.

The plant from which the drug cascara of commerce is secured.

6663. MAURANDIA BARCLAIANA.

Presented by Prof. Jos. Burtt Davy, Berkeley, Cal. Received May 27, 1901.

6664. MADIA SATIVA.

Presented by Prof. Jos. Burtt Davy, Berkeley, Cal. Received May 27, 1901.

6665. ELAEAGNUS LONGIPES. **Goumi.**

Presented by Prof. Jos. Burtt Davy, Berkeley, Cal. Received May 27, 1901.

6666. ACACIA RETINODES (?).

Presented by Prof. Jos. Burtt Davy, Berkeley, Cal. Received May 27, 1901.

In Kew Index synonymous with *A. neriifolia.*

6667. EUPHORBIA LATHYRIS.

Presented by Prof. Jos. Burtt Davy, Berkeley, Cal. Received May 27, 1901.

6668. STERCULIA DIVERSIFOLIA.

Presented by Prof. Jos. Burtt Davy, Berkeley, Cal. Received May 27, 1901.

6669. VICIA FABA. **Broad bean.**

Presented by Prof. Jos. Burtt Davy, Berkeley, Cal. Received May 27, 1901.

6670. VICIA GIGANTEA. **Vetch.**

Presented by Prof. Jos. Burtt Davy, Berkeley, Cal. Received May 27, 1901.

6671. Cannabis indica. **Hemp.**

From Royal Botannical Garden, Sibpur, Calcutta, India. Received May 31, 1901.

6672. Larix leptolepis. **Japanese larch.**

From Japan. Received through Vilmorin Andrieux & Co., Paris, France, June 3, 1901.

6673 to 6678. Gossypium barbadense. **Cotton.**

From Cairo, Egypt. Received through Mr. D. G. Fairchild (Nos. 600–605, April 18, 1901), June 10, 1901.

"A collection of cottons which have been selected by Christian Stamm, of Cairo, from fields of the Egyptian cotton and from his own experimental plats.

6673.

Mit Afifi. Selected cream color. First year of selection.

6674.

Very large growing variety, 2 to 2.50 meters high, bearing very large capsules. Grown in Stamm's garden in Cairo.

6675.

Jannovitch. Cream colored, selected from Stamm's own garden.

6676.

The descendant of a cross between a variety sent year before last to Mr. H. J. Webber and a variety called by Stamm "Berla." Shows tendency toward cream color.

6677.

Berla. Second generation. Selected from fields as the yellowest sort among many thousands. The yield of this sort was very high, even double that of many others grown in Stamm's garden.

6678.

"Wild cotton from Omdurman in the Sudan." (*Fairchild.*)

6679. Gossypium barbadense. **Cotton.**

From Shibin-el-Kanater, Egypt. Received through Mr. D. G. Fairchild, June 10, 1901.

Mit Afifi. Ordinary variety.

6680. Triticum durum. **Wheat.**

From Minieh, Egypt. Received through Mr. D. G. Fairchild (No. 634, May 5, 1901), June 10, 1901.

Mishriki. "A very fine variety of this wheat which was exhibited last season at the Khedivial Agricultural Society's show in Cairo, and which Mr. George P. Foaden, the secretary of the society, remarked as the finest he has ever seen in Egypt. Secured through Mr. Foaden's kindness from the grower in the province of Minieh, which lies between the twenty-eighth and twenty-ninth degrees of latitude. The wheat is grown on irrigated land, and from all I can ascertain is remarkably pure, considering how mixed almost all Egyptian wheats are. This wheat will probably not withstand the cold winters of the plains at all, but will very likely prove of great value in Texas. It is a hard wheat, whose qualities for macaroni making are quite unknown. Its yielding capacity, I believe, will prove satisfactory, although its resistance to rust, I surmise, may not equal that of other Egyptian sorts, for I notice the heads sent as samples are more or less rusted. Should be planted on soil receiving irrigation and tried as a *winter* wheat in the Southwest on good, rich, stiff soil." (*Fairchild.*) (See No. 7016.)

6681 to 6693.

From Alexandria, Egypt. Presented by the firm of B. Nathan & Co., through Mr. D. G. Fairchild. Received June 10, 1901. A collection of seeds of cultivated plants gathered in the Sudan by one of the firm.

6681. ANDROPOGON SORGHUM. **Sorghum.**

Kusabee, Arabic name.

6682. PANICUM MILIACEUM (?). **Broom-corn millet.**

"Coming from the River Dukhu." (*Fairchild.*)

6683. SESAMUM INDICUM. **Sesame.**

6684. GOSSYPIUM sp. **Cotton.**

A mixed lot of seed of different races and even species.

6685. ANDROPOGON SORGHUM. **Sorghum.**

"Very good quality." (*Fairchild.*)

6686. ANDROPOGON SORGHUM. **Sorghum.**

Aish Abou Girdeh, Arabic name.

6687. CICER ARIETINUM. **Chick-pea.**

Hummos, Arabic name.

6688. LUPINUS sp. **Lupine.**

Tirmoos, Arabic name.

6689. ANDROPOGON SORGHUM. **Sorghum.**

Hajiree, Arabic name.

6690. ANDROPOGON SORGHUM. **Sorghum.**

Hamaisee, Arabic name.

6691. ANDROPOGON SORGHUM. **Sorghum.**

Feterite, Arabic name.

6692. PANICUM MILIACEUM (?). **Broom-corn millet.**

Dukhu, Arabic name.

6693. ANDROPOGON SORGHUM. **Sorghum.**

Safra, Arabic name.

6694 to 6711.

From Pekin, China. Received through Dr. G. D. Brill, June 12, 1901. A collection of seeds of cultivated plants, as follows:

6694. CUCUMIS SATIVUS. **Cucumber.**

"This forcing cucumber is grown with heat during the winter. Many specimens were from 1 foot to 18 inches long, very crisp, and of good quality. Each had a small weight attached to it after it was an inch and a half long to keep it straight." (*Brill.*)

6695. CUCURBITA sp. **Squash.**

6696. SOLANUM MELONGENA. **Eggplant.**

"Large, purple, of very fine quality." (*Brill.*)

6697. CUCUMIS MELO. **Muskmelon.**

"Said to be of very good quality." (*Brill.*)

6694 to 6711—Continued.

6698. CUCURBITA sp. **Squash.**

"Flesh very white, much used by Chinese, cooked with meat or alone." (*Brill.*)

6699. RAPHANUS SATIVUS. **Radish.**

"Large, red, flat variety, resembling a turnip. Kept through the winter and much eaten raw, as well as cooked." (*Brill.*)

6700. RAPHANUS SATIVUS. **Radish.**

6701. RAPHANUS SATIVUS. **Radish.**

"A winter variety." (*Brill.*)

6702. RAPHANUS SATIVUS. **Radish.**

"A forcing variety, grown under mats or under benches in cucumber houses. It is sold in bunches when small. Globe shaped. It is also grown very thickly and the young radishes are pulled when about to send out the third leaf. For use in salads." (*Brill.*)

6703. RAPHANUS SATIVUS. **Radish.**

"Small, long, red variety." (*Brill.*)

6704. RAPHANUS SATIVUS. **Radish.**

"Long, white variety." (*Brill.*)

6705. BRASSICA OLERACEA. **Cabbage.**

"A very long-headed cabbage, 3 to 5 inches in diameter. The quality is said by foreigners to be excellent. Some say it has a very delicate flavor and can be eaten without causing indigestion by people who can not eat the 'foreign' cabbage." (*Brill.*)

6706. DAUCUS CAROTA. **Carrot.**

6707. APIUM GRAVEOLENS. **Celery.**

"Not very good in comparison with foreign varieties, but better than that of central China." (*Brill.*)

6708. CUCURBITA sp. **Gourd.**

"Hard shells used for drinking cups, etc." (*Brill.*)

6709. PANICUM MILIACEUM. **Broom-corn millet.**

"Much used in the place of rice by the people around Pekin. Cooked as porridge." (*Brill.*)

6710. ANDROPOGON SORGHUM. **Sorghum.**

"This is much grown for human food around Pekin and is considered much superior to the other varieties." (*Brill.*)

6711. PANICUM MILIACEUM. **Broom-corn millet.**

"This variety is said to withstand drought well." (*Brill.*)

6712. COFFEA ARABICA. **Coffee.**

From Macassar, Celebes, Dutch East Indies. Presented by Mr. K. Auer, U. S. Consular Agent at Macassar, through Messrs. Lathrop and Fairchild. (No. 385.) Received June 12, 1901.

Patjoe or *Bonthain.* A superior variety of coffee grown in southern Celebes.

6713 to 6730. PYRUS MALUS. **Apple.**

From Gosford, New South Wales. Received through Hunter & Sons, June 19, 1901.

A collection of varieties, as follows:

6713.
Fall Beauty.

6714.
Winter Majetin.

6715.
Autumn Tart.

6716.
Lord Wolseley.

6717.
Ruby Pearmain.

6718.
Golden Queen.

6719.
Northern Spy.

6720.
Menagerie.

6721.
Striped Beaufin.

6722.
Yarra Bank.

6723.
Chatastee.

6724.
Magg's Seedling.

6725.
Early Richmond.

6726.
Tetofsky.

6727.
Primate.

6728.
New England Pigeon.

6729.
Stubbard Codlin.

6730.
Irish Peach.

6731 to 6753. PYRUS MALUS. **Apple.**

From Emerald, Victoria. Received through Mr. C. A. Nobelius, June 19, 1901.

A collection of varieties, as follows:

6731.
Sharp's Early.

6732.
Cole's Rymer.

6733.
William Anderson.

6734.
Kooroochiang.

6735.
John Sharp.

6736.
Cliff's Seedling.

6737.
Santa Clara King.

6738.
Granny Smith.

6739.
Sharp's Late Red.

6740.
Ruby Gem.

6741.
Northern Spy.

6742.
Statesman.

6743.
Winter Majetin.

6744.
Early Richmond.

6731 to 6753—Continued.

6745.
Sharp's Nonesuch.

6746.
Ruby Pearmain.

6747.
Fall Beauty.

6748.
Irish Peach.

6749.
Magg's Seedling.

6750.
Lord Wolseley.

6751.
The Queen.

6752.
Shroeder's.

6753.
Taupaki.

6754 to 6772. PYRUS MALUS. **Apple.**

From Camden, New South Wales. Received from Ferguson & Son, June 19, 1901.

A collection of varieties, all grafted on Northern Spy stocks, as follows:

6754.
Striped Beaufin.

6755.
Golden Queen.

6756.
New England Pigeon.

6757.
Chatastee.

6758.
American Golden Pippin.

6759.
Menagerie.

6760.
Stubbart Codlin.

6761.
Ruby Pearmain.

6762.
Primate.

6763.
Lord Wolseley.

6764.
Yarra Bank.

6765.
Northern Spy.

6766.
Autumn Tart.

6767.
Winter Majetin.

6768.
Irish Peach.

6769.
Magg's Seedling.

6770.
Tetofsky.

6771.
Early Richmond.

6772.
Fall Beauty.

6773 to 6823. FICUS CARICA. **Caprifig.**

From Kabylia, Algeria. Received through Mr. C. S. Scofield, June 19, 1901.

"This collection, secured by Mr. Scofield in the spring of 1901, consists of cuttings of all the caprifig trees he observed in the vicinity of Tizi Ouzou and Fort National in the mountainous part of Kabylia to the east of the town of Algiers. No data could be secured in regard to most of the numbers and some may prove to be duplicates. All of the 50 numbers are caprifigs, with the exception of 6819, which is an ordinary edible fig. This collection, as well as those enumerated before in this inventory, was secured in the hope of getting an assortment of caprifigs having as wide a range of climatic and soil requirements as possible, in the hope of finding varieties suited to harbor the blastophaga in all parts of California and the Southwest where fig culture is feasible. These varieties are on trial in the Department gardens, and will be distributed when their qualities have been determined." (*Swingle.*)

6773.

"Cuttings from tree No. 18, growing along road from Fort National to Tizi Ouzou." (*Scofield.*)

6774.

"Cuttings from tree No. 11, growing along road from Fort National to Tizi Ouzou." (*Scofield.*)

6775.

"Cuttings from a large tree (No. 33) in the rich bottom lands about a mile or two beyond Tizi Ouzou on the way from Fort National." (*Scofield.*)

6776.

"Cuttings from tree No. 12 along the road from Fort National to Tizi Ouzou." (*Scofield.*)

6777.

"Cuttings from a large and very fine orchard above Mr. Bankhardt's mill, 4 or 5 miles out of Tizi Ouzou on the road to Fort National." (*Scofield.*)

6778.

"Cuttings from a large and very fine orchard just above Mr. Bankhardt's mill, 4 or 5 miles out from Tizi Ouzou on the road to Fort National." (*Scofield.*)

6779.

"Cuttings from tree No. 22 along the road from Fort National to Tizi Ouzou." (*Scofield.*)

6780.

"Cuttings from tree No. 23 along the road from Fort National to Tizi Ouzou." (*Scofield.*)

6781.

"Cuttings from a tree in large and very fine orchard above the mill belonging to Mr. Bankhardt, 4 or 5 miles out from Tizi Ouzou on the road to Fort National." (*Scofield.*)

6782.

"Cuttings from tree No. 10 along the road from Fort National to Tizi Ouzou." (*Scofield.*)

6783.

"Cuttings from tree No. 14 along road from Fort National to Tizi Ouzou. (Possibly *Ghazarh*, *early*. Cuttings from tree in immediate vicinity of Tizi Ouzou. Label lost.)" (*Scofield.*)

6784.

"Cuttings from tree No. 21 along the road from Fort National to Tizi Ouzou." (*Scofield.*)

6785.

"Cuttings from tree No. 6 on the road from Fort National to Tizi Ouzou." (*Scofield.*)

6773 to 6823—Continued.

6786.

"Cuttings from a large and very fine orchard just above Mr. Bankhardt's mill, 4 or 5 miles out from Tizi Ouzou on the road to Fort National." (*Scofield.*)

6787.

"Cuttings from tree No. 24 along the road from Fort National to Tizi Ouzou." (*Scofield.*)

6788.

"Cuttings from tree No. 13 along the road from Fort National to Tizi Ouzou, near Fort National." (*Scofield.*)

6789.

Dhaalou, No. 1. "Cuttings from tree on north side of valley in the immediate vicinity of Tizi Ouzou." (*Scofield.*)

6790.

"Cuttings from tree No. 15 along the road from Fort National to Tizi Ouzou." (*Scofield.*)

6791.

"Cuttings from very fine large tree growing in rich bottom lands a mile or so beyond Tizi Ouzou." (*Scofield.*)

6792.

"Cuttings from tree No. 7 along the road from Fort National to Tizi Ouzou." (*Scofield.*)

6793.

Ghazar, No. 1, an early variety. "Cuttings from tree in immediate vicinity of Tizi Ouzou. (Possibly another kind, No. 14, from tree along road from Fort National to Tizi Ouzou. Label missing.)" (*Scofield.*)

6794.

"Cuttings from tree near Fort National, on the other side (from Tizi Ouzou). Tree still carried the winter fruit in considerable numbers." (*Scofield.*)

6795.

"Cuttings from tree in orchard in rich bottom lands a mile or two beyond Tizi Ouzou (from Fort National), tree of medium size." (*Scofield.*)

6796.

"Cuttings from a tree, No. 25, along the road from Fort National to Tizi Ouzou." (*Scofield.*)

6797.

"Cuttings from tree No. 4 along the road from Fort National to Tizi Ouzou." (*Scofield.*)

6798.

"Cuttings from tree No. 19 along the road from Fort National to Tizi Ouzou." (*Scofield.*)

6799.

"Cuttings from tree No. 17 along road from Fort National to Tizi Ouzou." (*Scofield.*)

6773 to 6823—Continued.

6800.

"Cuttings from tree No. 16 along road from Fort National to Tizi Ouzou." (*Scofield.*)

6801.

Ghazar, No. 3. "Cuttings obtained from large tree, south side of the valley, in immediate vicinity of Tizi Ouzou, rather late." (*Scofield.*)

6802.

"Cuttings from tree No. 8 along the road from Fort National to Tizi Ouzou." (*Scofield.*)

6803.

Texcout, No. 1. "Early variety. Cuttings from tree on north side of valley in the immediate vicinity of Tizi Ouzou." (*Scofield.*)

6804.

"Cuttings from tree on other side of Fort National from Tizi Ouzou. Worthy of mention, as they still carried the winter fruit in considerable numbers—both old and new fruits." (*Scofield.*)

6805.

"Cuttings from tree No. 20 along road from Fort National to Tizi Ouzou." (*Scofield.*)

6806.

"Cuttings from tree on south side of valley in the immediate vicinity of Tizi Ouzou. Name unknown; season medium, intermediate." (*Scofield.*)

6807.

Dhaalou, No. 2. "Cuttings from tree in immediate vicinity of Tizi Ouzou, from north side of valley." (*Scofield.*)

6808.

"Cuttings from a very fine, large tree in orchard in the rich bottom lands a mile or two beyond Tizi Ouzou from Fort National." (*Scofield.*)

6809.

Marza-Ko. "Cuttings from tree on north side of valley in the immediate vicinity of Tizi Ouzou." (*Scofield.*)

6810.

Dhaalou, No. 3. "Cuttings from tree on north side of valley in the immediate vicinity of Tizi Ouzou." (*Scofield.*)

6811.

Ahzaim (2). Late. "Cuttings from tree on north side of valley in immediate vicinity of Tizi Ouzou." (*Scofield.*)

6812.

"Cuttings from tree No. 9 along the road from Fort National to Tizi Ouzou." (*Scofield.*)

6813.

Ahzaim, No. 1. Late. "Cuttings from tree on north side of valley in immediate vicinity of Tizi Ouzou." (*Scofield.*)

6773 to 6823—Continued.

6814.

"Cuttings from tree No. 1, near Fort National, on road to Tizi Ouzou." (*Scofield.*)

6815.

Texkourt (short form). Late. "Cuttings from tree on south side of valley in the immediate vicinity of Tizi Ouzou." (*Scofield.*)

6816.

"Cuttings from tree in a large and very fine orchard just above a flour and oil mill belonging to Mr. Bankhardt. It is 4 or 5 miles out of Tizi Ouzou, on the road to Fort National." (*Scofield.*)

6817.

"Cuttings from a small, scraggy, but heavily fruited tree in orchard in the rich bottom lands a mile or two beyond Tizi Ouzou." (*Scofield.*)

6818.

"Cuttings from medium-sized trees in orchard in the rich bottom lands a mile or two beyond Tizi Ouzou." (*Scofield.*)

6819.

Bakor (not a caprifig). "Excellent tree. Cuttings from tree south of Tizi Ouzou." (*Scofield.*)

6820.

Tetouzel, No. 1. Early. (Spelled Teefouzel or Trefouzel.) "Cuttings from tree on south side of valley in the immediate vicinity of Tizi Ouzou." (*Scofield.*)

6821.

"Cuttings from tree No. 5 on the road from Fort National to Tizi Ouzou." (*Scofield.*)

6822.

"Cuttings from tree south of Tizi Ouzou." (*Scofield.*)

6823.

Ain Hjedjla. "Season medium. Cuttings from tree north of Tizi Ouzou." (*Scofield.*)

6824. PISTACIA VERA. **Pistache.**

From Smyrna, Asia Minor. Received through Mr. George C. Roeding, June 29, 1901.

"Very fine pistache nut from a Greek nurseryman in Smyrna." (*Roeding.*)

6825. TRIFOLIUM SPUMOSUM.

From Mustapha Superieur, near Algiers, Algeria. Received through Mr. C. S. Scofield, May 25, 1901.

"Seed from a plant found in the grounds of the former consulate of Denmark. They are from an especially fine plant and can not be easily replaced." (*Scofield.*)

6826. VERONIA ELEPHANTUM (?)

From Cairo, Egypt. Received through Mr. D. G. Fairchild (No. 609), May 24, 1901.

"A very pretty shade tree, suitable for planting in southern Florida or southern California. It grows and fruits well in the gardens in Cairo and is considered a desirable ornamental tree for parks." (*Fairchild.*)

6827. ZEA MAYS. **Corn.**

From Cairo, Egypt. Received through Mr. D. G. Fairchild (No. 624), July 1, 1901.

Secured for Mr. Fairchild by George P. Foaden, esq., secretary of the Khedivial Agricultural Society of Cairo.

Morelli. "It is a low-growing sort and does not exhaust the soil as the tall-growing American kinds do. As much as 80 bushels per acre are harvested in Egypt. It has been tested in comparison with the following American sorts and yielded heavier and twenty days earlier: *Morelli,* the Egyptian sort, yielded $12\frac{14}{15}$ ardebs per feddan; *Tender and True,* an American variety, yielded $11\frac{17}{21}$; *Hickory King,* also American, 10; and *Imperial Leaming* only 9 ardebs. (These are Egyptian units, given only for comparison.) It is a white variety, preferred to most others in Egypt because of its extreme earliness and great productivity. It grows scarcely half as high as the American sorts. Here in Egypt the maize is broadcasted very thickly, much as we plant fodder maize. The hill system is little known. Perhaps this and the irrigation system used in the comparative test may account for the comparatively high yield of the Egyptian. This variety should be tried in irrigated regions, such as those of southern California, and a quantity should be reserved for experiments in the Colorado Desert." (*Fairchild.*)

6828. QUEBRACHIA LORENTZII. **Quebracho colorado.**

From Tucuman, Argentina. Presented by Mr. Joel Blamey, Huasan, Andalgalá Catamarca, Argentina. Received July 5, 1901.

"Large handsome trees, 40 to 50 feet high, found in the heavy river bottom forests of Argentina and Paraguay, not yet introduced into this country. The wood is of a red color, very hard, contains from 25 to 28 per cent of tannin, and is impervious to weather conditions. Logs exposed for a hundred years are still sound. It is used in Argentina for beams in house and bridge building, railroad ties, all kinds of posts, and for tannin. There were imported into the United States in 1901 60,000 tons of extract, worth nearly $300,000. Klipstein & Co., New York, state that 240,000 tons of wood are also imported annually." (*Harrison.*)

6829. **Ebony tree.**

From Tucuman, Argentina. Received through Mr. Joel Blamey, Huasan, Andalgalá Catamarca, Argentina, July 5, 1901.

6830. **Viraris.**

From Tucuman, Argentina. Received through Mr. Joel Blamey, Huasan, Andalgalá Catamarca, Argentina, July 5, 1901.

6831. OLEA EUROPAEA. **Olive.**

From Tunis, nurseries of M. G. Castet. Presented by Dr. L. Trabut, Government Botanist of Algeria, through Mr. C. S. Scofield. Received July 2, 1901.

Chetoni or *Octonbri.* This is described by N. Minangoin as an oil olive "very common in northern Tunis at Tunis, Soliman, Tebourba, Bizerte, and Grombalia, where it enters to at least the extent of two-thirds into the composition of the olive orchards." (*Bulletin de la Direction de l'Agriculture et du Commerce, Regence de Tunis 6 No. 8, January, 1901, p. 35, pl. 6, fig. 11.*)

6832. FICUS CARICA. **Caprifig.**

From Aidin, Asia Minor. Received through Mr. George C. Roeding, July 5, 1901.

"Very large caprifig from S. G. Magnisalis, Aidin." (*Roeding.*)

6833. QUERCUS AEGILOPS. **Valonia oak.**

From Nazli, Province of Smyrna, Asia Minor. Received through Mr. George C. Roeding, July 5, 1901.

This species of evergreen oak is the one furnishing the "Valonia" of commerce, one of the best tanning materials known. The acorn cups are the parts containing the tannin.

6834. OLEA EUROPAEA. **Olive.**

From Aidin, Asia Minor. Received through George C. Roeding, July 5, 1901.

Early Aidin olive grown in the Meander Valley for oil. There must be 5,000,000 rees in this valley.

6835. FICUS CARICA. **Caprifig.**

From Aidin, Asia Minor. Received through Mr. George C. Roeding, June 5, 1901.

"Very largest and finest caprifig from S. G. Magnisalis, Aidin." (*Roeding.*)

6836. FICUS CARICA. **Caprifig.**

From Aidin, Asia Minor. Received through Mr. George C. Roeding, July 5, 1901.

"One of the largest caprifigs from S. G. Magnisalis, Aidin." (*Roeding.*)

6837. FICUS CARICA. **Caprifig.**

From Aidin, Asia Minor. Received through Mr. George C. Roeding, July 5, 1901.

"Another variety of black caprifig from S. G. Magnisalis, Aidin." (*Roeding.*)

6838. FICUS CARICA. **Caprifig.**

From Aidin, Asia Minor. Received through Mr. George C. Roeding, July 5, 1901.

"Very fine caprifig from garden of S. G. Magnisalis, Aidin." (*Roeding.*)

6839. FICUS CARICA. **Caprifig.**

From Aidin, Asia Minor. Received through Mr. George C. Roeding, July 5, 1901.

"Black caprifig from garden of S. G. Magnisalis, Aidin." (*Roeding.*)

6840. FICUS CARICA. **Caprifig.**

From Aidin, Asia Minor. Received through Mr. George C. Roeding, July 5, 1901.

"Loose sample to show method of budding, inclosed with Nos. 6838 and 6839." (*Roeding.*)

6841. PRUNUS ARMENIACA. **Apricot.**

From Aidin, Asia Minor. Received through Mr. George C. Roeding, July 5, 1901.

"A small freestone apricot, having a very sweet kernel, with a flavor like an almond." (*Roeding.*)

6842. MEIBOMIA ILLINOENSIS. **Beggar weed.**

From Manhattan, Kans. Presented by Mr. J. M. Westgate. Received July 8, 1901.

A leguminous plant, possibly of some value for forage or green manure, which grows on the prairie lands of central Kansas. Seed ripens in summer and autumn. This sample was collected in the autumn of 1900.

6843. PUNICA GRANATUM. **Pomegranate.**

From Smyrna, Asia Minor. Received through Mr. George C. Roeding, July 8, 1901.

Schekerdekses. "Seedless pomegranate." (*Roeding.*)

6844. PRUNUS ARMENIACA. **Apricot.**

From Smyrna, Asia Minor. Received through Mr. George C. Roeding, July 8, 1901.

"A very large apricot, growing in the garden of Doctor Lane, American consul, Smyrna. Kernel sweet." (*Roeding.*)

6845. PRUNUS ARMENIACA. **Apricot.**

From Smyrna, Asia Minor. Received through Mr. George C. Roeding, July 8, 1901.

"A large freestone apricot, having sweet kernels like an almond " (*Roeding.*)

6846. PHOENIX DACTYLIFERA. **Date.**

From Orleansville, Algeria. Presented by M. Yahia ben Kassem. Received May, 1901.

Deglet Noor.

6847. POPULUS sp. **Poplar.**

From Kephisia, near Athens, Greece. Received through Mr. George C. Roeding, July 17, 1901.

"A poplar resembling the silver leaf in foliage, but with smaller leaves. Tree very vigorous and of spreading habit. Superior to any poplar I have ever seen. I saw one tree 6 feet in diameter, whose estimated height was 125 feet, and which had a spread of branches of 80 feet." (*Roeding.*)

6848. MORUS sp. **Mulberry.**

From Royal Grounds, Kephisia, near Athens, Greece. Received through Mr. George C. Roeding, July 17, 1901.

"A variety of mulberry with large, dark-green, rough leaves, no gloss, and having very fine fruit." (*Roeding.*)

6849. PISTACIA VERA. **Pistache.**

From Athens, Greece. Received through Mr. George C. Roeding, July 17, 1901.

"Buds of a very fine pistache nut from the garden of the agricultural experiment station at Athens." (*Roeding.*)

6850. FICUS CARICA. **Caprifig.**

From Kephisia, near Athens, Greece. Received through Mr. George C. Roeding, July 17, 1901.

"A late fruiting variety of caprifig." (*Roeding.*)

6851 to 6912.

From Oneco, Fla. Received through the firm of Reasoner Brothers, July 5, 1901.

A collection of ornamental and economic plants (nomenclature is in the main that of the nurserymen):

6851.	ABERIA CAFFRA.	**Kei apple.**
6852.	ANACARDIUM OCCIDENTALE.	**Cashew.**
6853.	ANONA MURICATA.	**Sour sop.**
6854.	ARTOCARPUS INTEGRIFOLIA.	**Jack fruit.**
6855.	COCCOLOBA UVIFERA.	**Shore grape.**

6851 to 6912—Continued.

6856. Cupania sapida. **Akee.**

"The fruits are said to be delicious when eaten in omelettes." (*Fairchild.*)

6857. Ficus glomerata. **Cluster fig.**

6858. Malpighia glabra. **Barbados cherry.**

6859. Melicocca bijuga. **Spanish lime.**

6860. Phyllanthus emblica. **Emblic myrobalan.**

"This is not the true myrobalan of commerce, although its fruits are used for tanning purposes, according to Talbot." (*Trees, Shrubs, and Woody Climbers of the Bombay Presidency*, 2d ed., p. 300.)

6861. Spondias dulcis. **Otaheite apple.**

6862. Terminalia catappa. **Tropical almond.**

6863. Rhodomyrtus tomentosa. **Downy myrtle.**

6864. Amomum cardamomum. **Cardamom.**

6865. Cedrela odorata. **Jamaica cedar.**

6866. Cedrela toona. **Toon tree.**

6867. Cinnamomum cassia. **Chinese cinnamon.**

6868. Crescentia cujete. **Calabash tree.**

6869. Garcinia morella. **Gamboge.**

6870. Guaiacum officinale. **Lignum-vitæ.**

6871. Lawsonia alba. **Henna.**

6872. Maranta arundinacea. **Bermuda arrowroot.**

6873. Dittelasma rarak. **Indian soap berry.**

6874. Semecarpus anacardium. **Marking nut tree.**

6875. Zingiber officinale. **Ginger.**

6876. Cupressus funebris. **Funeral cypress.**

6877. Abrus precatorius. **Crab's eye vine.**

6878. Ardisia polycephala.

6879. Baphia racemosa.

6880. Bauhinia acuminata. **Mountain ebony.**

6881. Bauhinia galpini.

6882. Brunfelsia macrophylla.

6883. Butea frondosa. **Bastard teak.**

6884. Poinciana regia. **Royal poinciana.**

6885. Caesalpinia pulcherrima. **Dwarf poinciana.**

6851 to 6912—Continued.

6886. Caesalpinia sappan. **Sappan.**

"The pods and hard wood of this plant yield the valuable red dye used in coloring silk. A native of the Asiatic tropics." (*Talbot.*)

6887. Dillenia indica. **Gunstock tree.**

"Native of India. Ripe fruit eaten in curries. Wood durable, used for gunstocks." (*Talbot.*)

6888. Dracaena draco. **Dragon's blood.**

Native of the Canary Islands, where, until recently, a noted tree of great age and size was standing. A valuable and curious ornamental for parks.

6889. Ficus hispida.

6890. Hibiscus tiliaceus.

"Fiber used in India for the manufacture of elephant timber-dragging ropes." (*Talbot.*)

6891. Jacquinia armillaris.

6892. Maba natalensis.

6893. Thevetia nereifolia. **Trumpet flower.**

6894. Atalantia trimera.

6895. Turraea floribunda (?)

6896. Tutsia ambosensis.

(Not in Kew Index.)

6897. Toddalia lanceolata.

6898. Acrocomia sclerocarpa.

6899. Attalea cohune.

6900. Caryota urens.

6901. Chamaerops humilis.

6902. Chamaerops humilis var. spinosa.

6903. Chamaerops farinosa.

(Not in Kew Index.)

6904. Rhapidophyllum hystrix.

6905. Cocos australis.

6906. Cocos alphonsei.

6907. Cocos bonneti.

6908. Elaeis guineensis. **Oil palm.**

6909. Bactris gasipaës.

6910. Bactris utilis.

6911. Licuala grandis.

6912. Licuala rumphii.

6913 to 6932.

From Mexico. Received through Dr. J. N. Rose, assistant curator, U. S. National Museum, July 9 and 10, 1901.

A collection of Mexican ornamentals and economic plants, many of which have not been specifically identified; made in 1901 by Dr. J. N. Rose. No further data than Doctor Rose's numbers and the generic names were at hand when this inventory was prepared.

6913. Oxalis sp. (No. 207.)

6914. Oxalis sp. (No. 208.)

6915. Oxalis sp. (No. 209.)

6916. Oxalis sp. (No. 210.)

6917. Oxalis sp. (No. 211.)

6918. Oxalis sp. (No. 212.)

6919. Hymenocallis harrisoniana. (No. 222.)

6920. (No. 213.) **"Pepo."**

6913 to 6932—Continued.

6921. Cissus sp. (No. 201.)

6922. Echeveria platyphylla, Rose, n. sp. (No. 202.)

6923. Echeveria maculata, Rose, n. sp. (No. 217.)

6924. Fouquieria splendens. (No. 205.)

6925. Zephyranthes sp. (No. 206.)

6926. Zephyranthes sp. (No. 214.)

6927. Ampelopsis sp. (No. 215).

6928. Tradescantia crassifolia. (No. 216.)

6929. Sedum sp. (No. 218.)

6930. Solanum sp. (No. 219.)

6931. Erythrina sp. (No. 220.)

6932. Tillandsia sp. (No. 221.)

6933 to 6958.

From Malta. Received through Mr. D. G. Fairchild, July 9 and 10, 1901.

A collection of figs, loquats, pomegranates, and citrous fruits secured during a short stay in Malta in May, 1901. In most cases scions only were sent.

6933. Ficus carica. **Fig.**

A large white variety. (No. 685e.)

6934. Ficus carica. **Fig.**

(No. 685.)

6935. Punica granatum. **Pomegranate.**

(No. 679.)

6936. Punica granatum. **Pomegranate.**

(No. 677.)

6937. Punica granatum. **Pomegranate.**

St. Catherine. (No. 673.)

6938. Eriobotrya japonica. **Loquat.**

(No. 681.)

6939. Eriobotrya japonica. **Loquat.**

(No. 684.)

6940. Punica granatum. **Pomegranate.**

St. Joseph. (No. 674.)

6941. Ficus carica. **Fig.**

Xehba. (No. 685c.)

6942. Ficus carica. **Fig.**

Barnisotte. (No. 685f.)

6943. Eriobotrya japonica. **Loquat.**

(No. 680.)

6944. Punica granatum. **Pomegranate.**

Santa Rosa. (No. 675.)

6945. Eriobotrya japonica. **Loquat.**

(No. 682.)

6933 to 6958—Continued.

6946. Ficus carica. **Fig.**

Black Parsot or *Barnisotte*. (No. 685d.)

6947. Citrus aurantium. **Orange.**

"The *round* blood orange of the island of Malta. This variety has nearly always a blood-colored flesh and is one of the best strains of oranges on the island. Probably originated here or was brought here at a very early date. It is quite distinct from No. 6948 and not esteemed so highly." (*Fairchild.*)

6948. Citrus aurantium. **Orange.**

"An *oval* blood orange, said by Dr. Giovanni Borg, a specialist in citrous matters in Malta, to be the finest flavored orange on the island. Personally I find it superior to No. 6947 and unparalleled for its remarkably vinous flavor." (*Fairchild.*)

6949. Eriobotrya japonica. **Loquat.**

"Seeds of some very large loquats from Bosketto Gardens, Malta, collected May 22, 1901." (*Fairchild.*)

6950. Citrus aurantium. **Orange.**

Maltese *oval seedless*. "Cuttings taken from trees in the governor's palace grounds in Malta. This is the best known seedless Malta orange. My experience is that it sometimes has a few seeds or rudiments of seeds in it. By many it is thought to be the best orange in Malta." (*Fairchild.*)

6951. Citrus limetta. **Lime.**

"A variety of lime growing in the gardens of San Antonio near Valetta. The origin of this variety is unknown by Doctor Borg, the citrus specialist. The fruits are almost without exception quite seedless and attain a very considerable size for limes, being often 3 inches long by 2¼ inches in smaller diameter. Doctor Borg says that owing to the peculiar flavor (a typical lime flavor) this is not appreciated in Malta, people preferring forms *with* seeds. It is a very juicy sort, with thinnish rind, and of a good color. Possibly this is the same as that sent in by Mr. Swingle (No. 3412) from Algiers. The trees are very vigorous here, even strikingly so. They commonly bear only one crop of fruit, but occasionally two crops are produced. A single fruit yielded one-fourth of an ordinary drinking glass full of juice of good flavor. Secured through the kindness of Dr. Giovanni Borg, of San Antonio Gardens, at the governor's palace." (*Fairchild.*)

6952. Ficus carica. **Fig.**

Tin Baitri or *St. Johns*. "Precocious fig, two cropper." (*Fairchild.*) (No. 685h.)

6953. Ficus carica. **Fig.**

Tina baida. (No. 685b.)

6954. Citrus aurantium. **Orange.**

Lumi-laring. "A remarkable variety of orange otherwise known as the Sweet orange or China orange. It is *always sweet even when quite green and immature*. Doctor Bonavia, well known as a specialist on the oranges of India, speaks of this variety in a recent article in the Journal of the Royal Horticultural Society, April, 1901 (Vol. XXV, pt. 3, p. 308). He remarks: 'I am informed that in Malta there exists a unique orange of the same (Portugal orange) group, but which is never sour from beginning to end, but sweet and juicy. * * * I have never met with an orange of this description in India. It would be worth while getting hold of it for the purpose of multiplying it and bringing it into commerce. Such a unique orange, I believe, has never appeared on the English market.' In Malta this orange is not very highly esteemed, and personally I find it not nearly so agreeable as the sour varieties, but nevertheless it is far superior to an immature sour orange. It is as sweet as sugar and water, and is declared to be just as sweet when half grown as when mature. It may have a decided value commercially, and will find many

6933 to 6958—Continued.

who will appreciate it. If it proves to be early ripening enough it might be sent to market much in advance of the sour sorts, when it would surprise all buyers by its sweet flavor at a time when all other varieties were too sour to be appreciated. It is medium in size, globular in shape, skin good and of fair thickness, flesh fine color and juicy, and color medium dark orange." (*Fairchild.*)

6955. Eriobotrya japonica. **Loquat.**

(No. 683.)

6956. Ficus carica. **Fig.**

(No. 685g.)

6957. Ficus carica. **Caprifig.**

Duccar. (No. 686.)

6958. Eriobotrya japonica. **Loquat.**

Seeds of large fruits.

6959. Triticum sp. **Wheat.**

From Shibin-el-Kanatir, Egypt. Received through Mr. D. G. Fairchild (No. 653, May 11, 1901), July 11, 1901.

"A collection of selected typical races of Egyptian wheat, gathered from the fields about a small village between Zagazig and Cairo. These are the best, and they show how mixed the races of Egyptian wheat are, but at the same time how remarkably free from rust. The wheat was mostly dead ripe when gathered May 7, while American sorts grown at Cairo were several weeks behind. All grown by perennial irrigation." (*Fairchild.*)

6960. Citrus limonum. **Lemon.**

From Chios, Turkey. Presented by Mr. N. J. Pantelides through Mr. D. G. Fairchild (No. 590, March 23, 1901). Received July 17, 1901.

Paffa. "A variety of almost seedless lemon, grown in the island of Chios." (*Fairchild.*)

6961 to 6977.

From Rouïba, Algeria. Received through Mr. C. S. Scofield.

A collection of the root tubercles of a number of leguminous forage plants collected by Mr. C. S. Scofield in May, 1901, at Dr. L. Trabut's experimental gardens.

6961. Vicia faba. **Horse bean.**

6962. Vicia lutea.

6963. Trigonella foenum-graecum.

6964. Astragalus boeticus.

6965. Melilotus infesta.

6966. Onobrychis viciaefolia. **Sainfoin.**

6967. Anthyllis tetraphylla.

6968. Anthyllis tetraphylla.

6969. Scorpiurus sulcata.

6970. Lotus tetragonolobus. **Square pea.**

6971. Lupinus angustifolius. **Blue lupine.**

6972. Lupinus termis.

6973. Lathyrus tingitanus.

6974. Lathyrus clymenum.

6975. Lotus edulis.

6976. Lotus ornithopodioides.

6977. Ononis alopecuroides.

6978 to 6995.

(Numbers not utilized.)

6996. TRITICUM VULGARE. **Wheat.**

From Oklahoma Agricultural Experiment Station Farm, Stillwater, Okla. Received July 26, 1901.

Weissenburg. Box containing a few heads of wheat grown from No. 5499 during season 1900–1901.

6997. TRITICUM VULGARE. **Wheat.**

From Oklahoma Agricultural Experiment Station Farm, Stillwater, Okla. Received July 26, 1901.

Weissenburg. Bag of wheat grown from No. 5499 during season 1900–1901.

6998. MEDICAGO SATIVA. **Alfalfa.**

From Gizeh, near Cairo, Egypt. Received through Mr. D. G. Fairchild, July 1, 1901.

"A small package of dried plants of alfalfa with roots showing very few nodules. These plants were grown from Argentine seed sent to Cairo by the Office of Seed and Plant Introduction and Distribution, U. S. Department of Agriculture, and planted in the spring of 1901." (*Fairchild.*)

6999. CICER ARIETINUM. **Chick-pea.**

From Gizeh, near Cairo, Egypt. Received through Mr. D. G. Fairchild, July 1, 1901.

Package of dried plants and roots for root tubercle germ. (See No. 6961.)

7000. TRIFOLIUM ALEXANDRINUM. **Berseem.**

From Gizeh, near Cairo, Egypt. Received through Mr. D. G. Fairchild, from the agricultural society. Collected about May 1, 1901.

"Roots of berseem dried in the shade. These roots came from a field which had just been grazed over by cattle." (See No. 6961.) (*Fairchild.*)

7001. PHOENIX DACTYLIFERA. **Date.**

From Fayum, Egypt. Received through Mr. D. G. Fairchild (No. 617), July 1, 1901.

Wahi. "Twenty kilos of dried fruit of a variety of date which is said to have been brought from Siwah, a small village in the oasis of Bahriyeh. It is to my taste the sweetest drying date in Egypt—at least it is much sweeter than the Amri or any other I have tasted. It has a very peculiar mealy flesh of golden to greenish yellow. The skin is very thin and smooth and of a golden brown shade. Seed short, rather large, and clinging to the meat rather firmly. The flesh is somewhat granulated with the sugar. I can not be certain that this variety did really come from Siwah, but it certainly is a sort not commonly seen at this season in Cairo, and is superior in flavor to that which is considered the best in Egypt. The word *Wahi* signifies merely oasis, according to Mr. H. A. Rankin, of Fayum." (*Fairchild.*)

7002. PHOENIX DACTYLIFERA. **Date.**

From Fayum, Egypt. Received through Mr. D. G. Fairchild (No. 618), July 1, 1901.

"Dried dates of the common variety of the Province of Fayum. They are of fair quality as a drying date, but are not equal to the 'Wahi' or 'Amri' dates, the former of which was for sale on the same market in Fayoum. It is probable that seedlings from these seeds will be mixed, although in northern Egypt only one variety of male plant is grown." (*Fairchild.*)

7003 to 7010.

From Mexico. A collection of plants received through Dr. J. N. Rose, July 15, 1901.

Doctor Rose's numbers are appended, no further data being on hand regarding the plants.

7003. Mammillaria sp. (No. 204).

7004. Mammillaria sp. (No. 225).

7005. Eryngium sp. (No. 227).

7006. Cissus sp. (No. 228).

7007. Manfreda sp. (No. 229).

7008. Hymenocallis sp. (No. 230).

7009. Oxalis pringlei sp. (No. 233).

7010. Oxalis sp. (No. 234).

7011. Ficus sycomorus. **Sycamore fig.**

From Biskra, Algeria. Received through Mr. D. G. Fairchild (No. 719, June 14, 1901), July 17, 1901.

"This is the sacred fig of the Egyptians. The fruit is produced in very large numbers on the main branches and trunk of the tree, being borne in clusters. The tree is used in Egypt extensively as an avenue tree, and forms one of the characteristic landscape trees of Egypt. Along the canals it grows luxuriantly and attains large dimensions. The trunk is often 2 feet or more in diameter, and the spread of the branches makes it an excellent shade tree. The objection is made by old residents, and, I feel, quite justly, that it is a 'dirty' tree, i. e., drops continually débris of green fruit and fruit stalks which have to be cleaned up. As a fruit, it is not highly esteemed by any but Arabs, who will eat almost anything. It is dry and mealy, and personally I do not care for it. The Arabs in Biskra, and also in Egypt, have a practice of cutting off the tips of the immature figs in order to make them ripen. Mr. Columbo, of Biskra, asserts that three days after this cutting is done the cut figs become twice as large as the uncut ones and develop a not unpleasant taste. It is quite possible that in Texas and Louisiana this fig might be keenly appreciated by children and even by adults." (*Fairchild.*)

7012. Quebrachia lorentzii. **Quebracho colorado.**

From Terr. Nac. de Misiones, Argentina. Presented by Mr. W. G. Davis, of Cordoba. Received July 17, 1901.

"These trees are found in the central northern sections of the Republic. In the provinces of Catamarca and Rioj and San Luis the rainfall rarely exceeds 300 mm. a year. Over a large extent of the quebracho forests in Santiago del Estero the average rainfall does not exceed 200 mm." (*Davis.*) (See No. 6828.)

7013. Aspidosperma quebracho-blanco. **Quebracho blanco.**

From Terr. Nac. de Misiones, Argentina. Presented by Mr. W. G. Davis, of Cordoba. Received July 17, 1901.

See No. 6828.

7014. Cola acuminata. **Kola nut.**

From Hope Gardens, Kingston, Jamaica. Received through the director, Dr. William Fawcett, July 18, 1901.

7015. Cucumis melo. **Muskmelon.**

From Bassousa, Egypt. Received through Mr. D. G. Fairchild (No. 633, May 1, 1901), July 1, 1901.

Shaman. "A variety of cantaloupe said to be small, oblong, often egg-shaped, and of a peculiarly delicate flavor. Very highly spoken of by Englishmen in Egypt. Bassousa is the most noted melon-growing center of Egypt." (*Fairchild.*)

7016. TRITICUM DURUM. **Wheat.**

From Alexandria, Egypt. Received from George P. Foaden, esq., secretary of the Khedivial Agricultural Society at Gizeh, through Mr. D. G. Fairchild, October 10, 1901.

Mishriki. A red durum wheat, of which samples have already been sent in for inspection. (See No. 6680.)

7017. CICER ARIETINUM. **Chick-pea.**

From Cairo, Egypt. Received through Mr. D. G. Fairchild (No. 622, April 26, 1901), July 1, 1901.

"The Syrian variety of chick-pea grown in Egypt and considered equal to the native sort. It has better seeds, however, being plumper and better formed." (*Fairchild.*)

7018. GOSSYPIUM BARBADENSE. **Cotton.**

From Fayum, Egypt. Received through Mr. D. G. Fairchild (No. 613), July 1, 1901.

Ashmuni. "Unginned cotton of this variety collected where it is exclusively grown, i. e., in the oasis of Fayum. I am informed that this variety is the only one which will succeed well in this province. The *Afifi*, *Jannovitch*, and *Abbasi* have all been tried, although, I suspect, not thoroughly. This variety may be better suited to upland cultivation than the *Jannovitch* or *Afifi*, and may be more resistant to the wilt disease." (*Fairchild.*) (See No. 7025 for ginned seed.)

7019. GOSSYPIUM BARBADENSE. **Cotton.**

From Cairo, Egypt. Received through Mr. D. G. Fairchild (No. 648, May 11, 1901), July 1, 1901.

Mit Afifi. Secured by George P. Foaden, esq., of the Khedivial Agricultural Society, Cairo.

7020. VICIA FABA. **Horse bean.**

From Cairo, Egypt. Received through Mr. D. G. Fairchild (No. 632, April 26, 1901), July 1, 1901.

"These are the varieties which took the prizes at the Agricultural Fair in Cairo last year. They are introduced for comparative trial with the other sorts." (*Fairchild.*)

7021. CICER ARIETINUM. **Chick-pea.**

From Cairo, Egypt. Received through Mr. D. G. Fairchild (No. 626, April 26, 1901), July 1, 1901.

Hommos Beledi. "The native variety of chick-pea. This variety is grown usually for food. The green peas are eaten raw, while the ripe peas are cooked. In Egypt this chick-pea is planted in October or November at the rate of from 30 to 40 pounds of seed per acre, depending upon whether it is sown in drills or broadcasted. On irrigable land it is watered when sown, again when in flower, and the third time when the seeds are being formed. This plant will probably prove of value as a winter soiling crop in the Southwestern States. In parts of the country subject to frost it should be sown in May or June. In parts of Egypt the plants are dried and fed to cattle. Care must be taken, however, in using it for this purpose, as it is known sometimes to be injurious to horses and even to cattle. The seeds, however, make an excellent food for domestic animals." (*Fairchild.*)

7022. LUPINUS TERMIS. **Egyptian lupine.**

From Cairo, Egypt. Received through Mr. D. G. Fairchild (No. 628, April 26, 1901), July 1, 1901.

"A variety of lupine planted by the Egyptians on the dry sandy edges of the irrigation basins of Upper Egypt. The seeds are sown broadcast after the irrigation water has subsided, and no more attention is given to their culture until the lupines are harvested. It is considered a valuable crop for increasing the nitrogen in the soil and the beans are eaten by the natives after being boiled in salt water. Should be tried as a soiling crop in arid regions where a single irrigation is possible." (*Fairchild.*)

7023. GOSSYPIUM BARBADENSE. **Cotton.**

From Alexandria, Egypt. Received through Mr. D. G. Fairchild (No. 593), July 1, 1901.

Jannovitch. "This variety is said to be losing in popularity in Egypt. Its yield is lighter, at least 10 per cent, and its staple, although longer than that of *Mit Afifi*, is said to be falling off in length. It is open to the serious objection that the bolls open and allow the cotton to fall to the ground early, thus making its cleaning expensive, since the natives pick it up from the ground where it has lain and become filled with dirt." (*Fairchild.*)

7024. VICIA FABA. **Horse bean.**

From Cairo, Egypt. Received through Mr. D. G. Fairchild (No. 621), July 1, 1901.

Saida. "This important fodder crop of Egypt, which forms an article of export amounting in 1898 to over one and one-half million dollars' worth, and which seems entirely unknown in America, is worthy of the most serious attention. For the Colorado Desert region and southern Texas, Louisiana, and California, the broad bean may be of great importance. This variety comes from Upper Egypt, where the bean is grown most extensively. It is a *winter* crop in Egypt and must be fitted in to American conditions. It is killed by too cold or too hot weather." (*Fairchild.*)

7025. GOSSYPIUM BARBADENSE. **Cotton.**

From Fayoum, Egypt. Received through Mr. D. G. Fairchild (No. 614, April 21, 1901), July 1, 1901.

Ashmuni. "From the ginning mill of Theodore Bakoum, Fayum. This is probably of a mixed character. See No. 7018 for sample of staple. For trial against the root disease and on uplands. It is all grown here by irrigation and is claimed to be the only sort which pays in the Fayum oasis." (*Fairchild.*)

7026. GOSSYPIUM BARBADENSE. **Cotton.**

From Cairo, Egypt. Received through Mr. D. G. Fairchild (No. 649, May 11, 1901), July 1, 1901.

Jannovitch. "Seed from plants which have been grown on land containing from 1 to 1½ per cent of salt. It is presumed that this seed will be adapted to experiments with similar soils in America and possibly will prove more resistant to the wilt disease than the *Jannovitch* seed taken from plants growing in soil with less salt in it or without any. Secured by Mr. Foaden from the lower Delta region. In quality the fiber is said to equal that coming from plants grown on the less saline soils." (*Fairchild.*)

7027. GOSSYPIUM BARBADENSE. **Cotton.**

From Cairo, Egypt. Received through Mr. D. G. Fairchild (No. 631, April 26, 1901), July 1, 1901.

7028. ERVUM LENS. **Lentil.**

From Cairo, Egypt. Received through Mr. D. G. Fairchild (No. 627, April 26, 1901), July 1, 1901.

Saidi. "The upper Nile lentil, which is cultivated in Egypt, is an important food crop. Lentils amounting in value to over $90,000 were exported in 1898 to England, France, and Turkey. It is remarkable that America should so long neglect the culture of this most excellent food plant. For some years a very well-known invalid food, called 'Revelenta Arabica,' has been manufactured in England which consists exclusively of a flour of the Egyptian lentil. Purées of lentil and lentil soup are delicacies of the European menus quite absent, generally, from American tables. As a forage crop as well, these lentils should receive serious study. This is a typical Egyptian variety. It brings nearly $2 per hectoliter, according to custom-house returns of exports. The yield varies from 20 to 25 bushels per acre and upward. Sown at rate of 1 bushel per acre broadcasted. Grown in irrigation basins. Requires little water." (*Fairchild.*)

7029. TRIGONELLA FOENUM-GRAECUM. **Fenugreek.**

From Cairo, Egypt. Received through Mr. D. G. Fairchild (No. 623, April 26, 1901), July 1, 1901.

"*Egyptian fenugreek* or *Helba*, as it is called by the Arabs. This plant yields an important condiment and its root system is so remarkably provided with tubercles that it is worthy serious attention as a green manure crop. The seeds are also of value for feeding purposes, and a large amount of fodder is produced, which, if cut before seeds ripen, is of excellent quality. The condition powders and condiment foods which are sold in England extensively and fed to ailing horses and cattle are mixtures of the fenugreek with other meals or grains. It is sometimes planted with berseem here to give a slight purgative effect to the green fodder given so commonly in Egypt to horses and cattle." (*Fairchild.*)

7030. GOSSYPIUM BARBADENSE. **Cotton.**

From Cairo, Egypt. Received through Mr. D. G. Fairchild (No. 647, May 11, 1901), July 1, 1901.

Ashmouni. "Secured through the kindness of Mr. George P. Foaden. This should prove valuable for experiments in the hot dry uplands. It is the variety grown especially in the upper Nile region." (*Fairchild.*)

7031. TRIFOLIUM ALEXANDRINUM. **Berseem.**

From Cairo, Egypt. Received through Mr. D. G. Fairchild (No. 620, April 26, 1901), July 1, 1901.

Muscowi. "This variety, as noted in No. 4254, is the common variety of the Delta region. It is the variety from which the largest number of cuttings can be made and the one likely to prove of greatest use in America." (*Fairchild.*)

7032. HIBISCUS CANNABINUS. **Ambari hemp or Teale.**

From Cairo, Egypt. Received through Mr. D. G. Fairchild (No. 625, April 26, 1901), July 1, 1901.

"This fiber plant, which is used here as a wind-break for the cotton fields, may be worth investigating, as I am assured by Mr. George P. Foaden, of the Khedivial Agricultural Society, that the prices offered for it in the London markets are very high. This *Teale* may be quite a different variety from the ordinary Ambari hemp and better suited to culture in irrigated regions of America. Mr. Foaden intends trying several acres of it as a culture next year. It is planted at the same time as the cotton in a thickly sown row around the cotton field, forming a sort of hedge. This practice is a very old one in Egypt. Some samples of this Egyptian *Teale* were sent to London and a quotation of £20 per ton was secured by Mr. Foaden." (*Fairchild.*) (See Dodge's "Fiber Plants," pp. 192–193.)

7033. TRITICUM VULGARE. **Wheat.**

From Cairo, Egypt. Received through Mr. D. G. Fairchild (No. 629, April 26, 1901), July 1, 1901.

Mezzafannager White. "A variety of Indian wheat which has recently been introduced into Egypt and has met with unusual success, being a much heavier yielder than the native. Though small in grain and thin husked, it yielded near Cairo about 12 bushels per acre more than any native sorts. Samples sent to England were pronounced 'the finest of their kind' by experts. The yield of straw was unusually large in some preliminary tests made on the grounds of the Khedivial Agricultural Society. On the Domain's lands last year there were about 1,500 acres of this Indian wheat planted and over 5,000 acres of native wheat. The Indian averaged nearly 12 bushels an acre more than the native. Less seed is required than of ordinary varieties, as the plant stools unusually well. Starts into growth more rapidly than native sorts. A winter wheat for warm climates. For information regarding this Indian wheat apply to George P. Foaden, esq., secretary of the Khedivial Agricultural Society of Cairo, through whose kindness this sample has been secured." (*Fairchild.*)

7034. ALLIUM CEPA. **Onion.**

From Cairo, Egypt. Received through Mr. D. G. Fairchild (No. 630, April 26, 1901), July 1, 1901.

"A native variety of onion which is grown in immense quantities on the islands and elsewhere on the upper Nile. These are for export mostly and in 1898 over $909,000 worth were exported. Train loads are piled on the wharves in Alexandria in March and April, from which point they are shipped all over Europe and even to New York, $5,365 worth going to this latter port during the quarter ending March 31, 1901. This onion forms one of the army rations now, I am told, and these Egyptian onions are of good, even superior quality. A Texas onion specialist who tested these Egyptian onions two years ago declared them to be the finest pickle onion he had ever seen. Deserves a wide distribution wherever irrigation prevails, as it is an onion for irrigated lands." (*Fairchild.*)

7035. VICIA FABA. **Horse bean.**

From Cairo, Egypt. Received through Mr. D. G. Fairchild (No. 650), July 1, 1901.

Beheri. "A variety of horse bean which is grown in the province of Beheri in lower Eygpt. It is a distinct variety from the *Saida* and should be tested in comparison with it. Especially valuable for experiments in irrigated regions of California, Arizona, and Texas. Secured through Mr. George P. Foaden, of the Khedivial Agricultural Society." (*Fairchild.*)

7036. GOSSYPIUM BARBADENSE. **Cotton.**

From Alexandria, Egypt. Received through Mr. D. G. Fairchild (No. 592), July 1, 1901.

Mit Afifi. "This variety is now more commonly grown than any other, and the *Jannovitch* variety, so popular two years ago, is said to be a lighter yielder and, by some, to be rapidly deteriorating. The *Mit Afifi* is not a white but a cream-colored cotton, and is prized especially for the manufacture of cream-colored underwear, hosiery, etc. It is also mixed with silk and is especially suited for this purpose." (*Fairchild.*)

7037. HEDYSARUM CORONARIUM. **Sulla.**

From Malta. Received through Mr. D. G. Fairchild (No. 689), July 23, 1901.

Malta. "Sulla from the island of Malta. This is a late maturing sort, useful when rains are abundant. It is a heavier yielder than that from Gozzo, and hence preferred by Maltese in places where there is plenty of moisture." (*Fairchild.*)

7038 to 7045. MANGIFERA INDICA. **Mango.**

From Bombay, India.

A collection of grafted mango plants, arranged for by Mr. John B. Beach, of West Palmbeach, Fla., through Latham & Co., Bombay. Received July 24, 1901.

7038.

Bath.

7039.

Fernandez.

7040.

Goa Alfonso.

7041.

Kala Alfoos.

7042.

Mazagon.

7043.

Roos.

7044.

Alfonso, or Alfoos.

7045.

Cowasjee Patel.

7046. GYMNOCLADUS CANADENSIS. **Kentucky coffee tree.**

From Botanic Gardens, Washington, D. C. Received through Mr. G. W. Oliver, July 23, 1901.

7047 to 7057.

From City of Mexico, Mexico. Received through Dr. J. N. Rose, July 26, 1901.

A collection of economic and ornamental plants and seeds made in Mexico in the summer of 1901. Doctor Rose's numbers are retained for identification.

7047. ERYTHRINA sp.

(No. 5301.)

7048. VITIS sp. **Grape.**

"A grape the stems of which die down to the ground every year. Fruit very large." (*Rose.*) (No. 5349.)

7049. ROSA sp. **Rose.**

(No. 5368.)

7050. OXALIS sp.

"Has beautiful red foliage." (*Rose.*) (No. 5389.)

7051. HYPTIS sp.

"Flowers red." (*Rose.*) (No. 5412.)

7052. TRIFOLIUM sp.

"A showy clover with large heads." (*Rose.*) (No. 5486.)

7053. CARDIOSPERMUM sp.

"A vine." (*Rose.*) (No. 5490.)

7054. ALBIZZIA sp.

"A beautiful leguminous tree cultivated in Mexico at an altitude of 7,000 feet. Flowers in spikes 2 or 3 inches long." (*Rose.*) (No. 5281.)

7055. **Zapote borracho.**

"A cultivated fruit." (*Rose.*) (No. 252.)

7056. PASSIFLORA sp.

"Edible fruit sold in markets." (*Rose.*) (No. 254.)

7057. CULPHEA sp.

(No. 5353.)

7058. COCHLEARIA ARMORACIA. **Horse-radish.**

From Stockholm, Sweden. Received through Lindahl's seed firm, July 27, 1901. (L. & F. No. 421.)

Enköping. A variety of horse-radish grown at Enköping, near Stockholm. It is as noted a sort in Sweden as the *Maliner Kren* is in Austria, and is cultivated in a similar way.

7059. CERATONIA SILIQUA. **Carob.**

From Alicante, Spain. Received through Mr. D. G. Fairchild (No. 742), July 29, 1901.

"A male variety of carob. In this region all trees of carobs are grafted or budded with this male sort. A large branch or, oftener, a secondary trunk is trained up into the center of the tree to furnish the pollen for the female flowers. This practice, which I have not observed in Greece or Algiers in the same degree of perfection, accounts no doubt for the heavy yields obtained here. This may be what is called *La Borrera.*" (*Fairchild.*)

7060. CERATONIA SILIQUA. **Carob.**

From Alicante, Spain. Received through Mr. D. G. Fairchild (No. 744), July 29, 1901.

Vera. "This is the sweetest carob I have ever tasted." (*Fairchild.*)

7061. AMYGDALUS COMMUNIS. **Almond.**

From Alicante, Spain. Received through Mr. D. G. Fairchild (No. 740), July 29, 1901.

Mollar. "A soft-shelled variety of almond grown in Alicante for table use. Especially relished when still green. The consumption of these green almonds in Mediterranean countries is very great. They are eaten with salt. This variety is not an exporting one, but may prove an addition to the orchards of California." (*Fairchild.*)

7062. AMYGDALUS COMMUNIS. **Almond.**

From Alicante, Spain. Received through Mr. D. G. Fairchild (No. 741), July 29, 1901.

Planeta. "The great exporting almond of this part of Spain. It is the variety best known and most extensively cultivated, not because it is altogether the best, according to local taste, but because of its shipping and good marketing qualities. It is wedge-shaped in form, with *hard* shell and a flat, heart-shaped kernel with medium thin skin. The *Jordan* almond, which fetches higher prices, I am told, is not grown here in Alicante. It has a thinner skin and finer flavor. The *Planeta* is, however, one of the first-class hard-shelled almonds." (*Fairchild.*)

7063. CERATONIA SILIQUA. **Carob.**

From Alicante, Spain. Received through Mr. D. G. Fairchild (No. 743), July 29, 1901.

Negra. "The commonest variety of carob grown around Alicante. It is a variety used for horse food almost entirely, and its yields are very large and regular. Every year a tree 20 years old will yield from 50 cents' worth to a dollar's worth of fruit. The culture is suited to waste places in dry soil. Trees here 200 years old yield yearly up to $3 worth apiece. This variety has little sugar in it and the seeds are surrounded by parchment. Not for table purposes." (*Fairchild.*)

7064 to 7070.

From City of Mexico, Mexico. Received through Dr. J. N. Rose, July 29, 1901.

A collection of economic and ornamental plants made in Mexico in 1901. The numbers given by Doctor Rose are retained for identification.

7064. COTYLEDON sp.

(No. 260.)

7065. MAMILLARIA sp.

(No. 261.)

7066. SEDUM sp.

(No. 263.)

7067. SEDUM sp.

(No. 264.)

7068. RUBUS sp. **Raspberry.**

"A fine raspberry and worthy of cultivation. Obtained a root and one ripe fruit. It grows at an elevation of 10,400 feet." (*Rose.*) (No. 265.)

7069. COMMELINA sp.

"A very beautiful greenhouse plant. It grows in Alpine meadows at 10,000 feet elevation." (*Rose.*) (No. 266.)

7070. SOLANUM sp.

(No. 267.)

7071. TRIGONELLA FOENUM-GRAECUM. **Fenugreek.**

From Batna (Constantin), Algeria. Received through Mr. D. G. Fairchild (No. 720), July 31, 1901.

"Sample of fenugreek seed arranged for by Mr. C. S. Scofield, coming from the mountains of the Aurès east of the town of Batna, on the high Algerian plateau. Used, as in Tunis, by the Jewesses to induce an excessive fleshiness, which is the fashion among them. This may prove a different variety and should be reserved for breeding purposes. Sent through the kindness of Mr. John Wild, of Batna." (*Fairchild.*)

7072 to 7100.

From Mexico. Received through Dr. J. N. Rose, July 31, 1901.

A collection of economic and ornamental plants made in Mexico in 1901. Doctor Rose's numbers are retained for identification.

7072. **Palm.**

(No. 253.)

7073. SOLANUM sp. **Potato.**

(No. 257.)

7074. SEDUM sp.

(No. 248.)

7075. BEGONIA sp.

(No. 238.)

7076. SEDUM sp.

(No. 239.)

7077. BEGONIA GRACILIS.

(No. 243.)

7078. SEDUM sp.

(No. 237.)

7079. DAHLIA sp.

(No. 242.)

7080. SEDUM sp.

(No. 235.)

7081. COTYLEDON sp.

(No. 245.)

7082. COTYLEDON sp.

(No. 236.)

7083. SEDUM sp.

(No. 247.)

7084. COTYLEDON sp.

(No. 255.)

7085. CEREUS sp.

(No. 223.)

7086. CEREUS sp.

(No. 224.)

7087. AGAVE sp.

(No. 246.)

7088. TILLANDSIA BENTHAMIANA.

(No. 241.)

7089. **Cactus.**

(No. 226.)

7090. **Cactus.**

(No. 203.)

7091. SENECIO sp.

(No. 256.)

7092. SENECIO sp.

(No. 258.)

7093. TILLANDSIA sp.

(No. 232.)

7072 to 7100—Continued.

7094. **Orchid.**

(No. 231.)

7095. **Cactus.**

(No. 251.)

7096. **Cactus.**

(No. 250.)

7097. NOLINA sp.

(No. 240.)

7098. COTYLEDON sp.

(No. 244.)

7099. TIGRIDIA sp.

(No. 269.)

7100. DASYLIRION sp.

(No. 262.)

7101 to 7108. MANGIFERA INDICA. **Mango.**

From Bangalore, India. Received through A. Lehmann, Ph. D., July 31, 1901.

A collection of grafted mangoes.

7101.

Peterpasand.

7102.

Mullgoa (*Mulgoba*).

7103.

Badami.

7104.

Amini.

7105.

Rajabury or *Rajpury.*

7106.

Raspbury.

7107.

Gada Mar.

7108.

Sandersha or *Sandershaw* (*Soondershaw*).

7109 to 7116.

From Avalon, Santa Catalina Islands, California. Received through Mrs. Blanche Trask, July, 1900.

A collection of seeds of native plants, as follows:

7109. HOSACKIA VENUSTA.

7110. HOSACKIA TRASKIAE.

7111. RHUS OVATA.

7112. GALIUM CATALINENSE.

7113. SENECIO HYONI.

7114. PHACELIA LYONI.

7115. LYONOTHAMNUS FLORIBUNDUS.

7116. ERIOGONUM GIGANTEUM.

7117. DANTHONIA CALIFORNICA.

From Berkeley, Cal. Received through Miss Alice F. Crane, January, 1901.

7118 to 7129.

From Berkeley, Cal. Received through Miss Alice F. Crane, January, 1901.

A collection of seeds of native Trifoliums, as follows:

7118. TRIFOLIUM GRACILENTUM.

7119. TRIFOLIUM BIFIDUM.

7118 to 7129—Continued.

7120. TRIFOLIUM CILIATUM.

7121. TRIFOLIUM MACRAEI.

7122. TRIFOLIUM INVOLUCRATUM.

7123. TRIFOLIUM PAUCIFLORUM.

7124. TRIFOLIUM PAUCIFLORUM.

7125. TRIFOLIUM TRIDENTATUM.

7126. TRIFOLIUM MICROCEPHALUM.

7127. TRIFOLIUM MICRODON.

7128. TRIFOLIUM FUCATUM.

7129. TRIFOLIUM FUCATUM, var. FLAVULUM.

7130. SOLANUM MELONGENA. **Eggplant.**

From Raleigh, N. C. Received through Prof. W. F. Massey, March 18, 1901.

7131. PASSIFLORA sp.

From Melbourne, Australia. Received from Carolin & Co. through Mr. G. W. Hill, Chief of the Division of Publications, U. S. Department of Agriculture.

7132. CERATONIA SILIQUA. **Carob.**

From Alicante, Spain. Received through Mr. D. G. Fairchild (No. 744), August 3, 1901.

Vera. "This is a poor yielder, but its fruits are so full of sugar that drops of sirup run out when the pods are broken. It is too dear for horse food and is eaten by the people as a delicacy. Its flesh is very crisp and lacks the harshness of other varieties. Its seeds are of a lighter color and the pods thicker. As a shade tree it is a finer looking variety, with larger leaves, than No. 7063." (*Fairchild.*) (See also Nos. 7060 and 7461.)

7133. AMYGDALUS COMMUNIS. **Almond.**

From Alicante, Spain. Received through Mr. D. G. Fairchild (No. 745), August 3, 1901.

Castillet. "A superlative sort of hard-shelled almond which was found in a garden at Mucha Miel, near Alicante. I have not been able to learn that this sort is known on the markets, although the owner assured me it brought a higher price than the *Planeta.* It is a larger, fuller shaped almond." (*Fairchild.*)

7134. AMYGDALUS COMMUNIS. **Almond.**

From Alicante, Spain. Received through Mr. D. G. Fairchild (No. 746), August 3, 1901.

Planeta. "Taken from an orchard at Mucha Miel, near Alicante. The names of these varieties are often mixed, and this may be slightly different from No. 7062." (*Fairchild.*)

7135. AMYGDALUS COMMUNIS. **Almond.**

From Alicante, Spain. Received through Mr. D. G. Fairchild (No. 748), August 3, 1901.

Fabrica. "A smaller and inferior sort to the *Planeta*, but said to be a good bearer. It is ten to fifteen days later than the *Planeta*, ripening about the middle or last of August." (*Fairchild.*)

7136. PRUNUS ARMENIACA. **Apricot.**

From Alicante, Spain. Received through Mr. D. G. Fairchild (No. 749), August 3, 1901.

Patriarca. "One of the largest fruited varieties of apricot in eastern Spain. Said to be of excellent quality. The apricots of Spain probably were introduced from

France originally, but have undergone changes in size and character, suiting them to the drought and heat of this more southern region. This *Patriarca* is the best large variety about Alicante, and is said to be a local sort." (*Fairchild.*)

7137. AMYGDALUS COMMUNIS. **Almond.**

From Alicante, Spain. Received through Mr. D. G. Fairchild (No. 755a), August 3, 1901.

Pastaneta. "A variety differing in form very materially from the other Spanish varieties. It has a truncated apex and is more or less rectangular. This variety is not planted largely about Alicante, but is the prevailing sort grown at Murcia, I am told. It fetches as high or even a higher price than the *Planeta.*" (*Fairchild.*)

7138. TRIFOLIUM PRATENSE. **Red clover.**

From New York. Received through J. M. Thorburn & Co., August 5, 1901.

7139. CICHORIUM ENDIVIA. **Endive.**

From Cassel, Germany. Received through Mr. George C. Roeding, August 5, 1901.

Self-closing, yellow Cassel summer endive.

7140. PRUNUS ARMENIACA. **Apricot.**

From Alicante, Spain. Received through Mr. D. G. Fairchild (No. 750), August 9, 1901.

Ull blanc. "A medium sized apricot famed as the finest small fruited variety in the neighborhood of Alicante. I did not have a chance to taste it, and can not vouch for its superiority." (*Fairchild.*)

7141 to 7145. MORUS sp. **Mulberry.**

From Murcia, Spain. Received through Mr. D. G. Fairchild (No. 757), August 10, 1901.

A collection of cuttings from the gardens of the Sericultural Institute of Murcia, Spain. The nomenclature is that furnished by the head gardener.

7141.
Esteril.

7142.
Arantiana.

7143.
Common, of Italy.

7144.
Glemosa.

7145.
Colson or *Lotson*, of Italy.

7146 to 7340.

From Erfurt, Germany. Received through Haage & Schmidt, seedsmen, August 10, 1901.

A collection of seeds as follows (the nomenclature is in the main that of the seedsmen):

7146. STRELITZIA AUGUSTA.

7147. AGERATUM CONYZOIDES (?)
Prinzessin Victoria Luise.

7148. AQUILEGIA CHRYSANTHA FLORE PLENO.

7149. AGERATUM CONYZOIDES (?)

7150. CUPRESSUS FUNEBRIS.

7151. ADENANTHERA PAVONINA.

7152. ANONA MACROCARPA (?)

7153. BETA CHILENSIS.
Golden yellow.

7154. MUSA MANNII (?)

7146 to 7340—Continued.

7155. Impatiens sultani splendens.

7156. Phlox drummondii.
Brilliant.

7157. Primula obconica grandiflora violacea.

7158. Croton sebiferum.

7159. Anona suavissima (?)

7160. Campanula persicifolia flore alba.

7161. Illicium floridanum.

7162. Begonia semperflorens hybrida flore pleno.

7163. Antirrhinium majus grandiflorum luteum.

7164. Papaver orientale hybridum.

7165. Aquilegia caerulea flore luteo.

7166. Cinchona officinalis.

7167. Acanthus mollis.

7168. Impatiens sultani nacré rosé.

7169. Strelitzia reginae.

7170. Anona reniformis (?)

7171. Cordyline australis.

7172. Phormium tenax variegata.

7173. Anona cherimolia.

7174. Anona squamosa.

7175. Torenia fournieri (edentula) compacta alba.

7176. Eucalyptus robusta.

7177. Phlox drummondi cinnabarina.

7178. Torenia fournieri grandiflora.

7179. Beta brasiliensis carmoisin-carmoisi (?)

7180. Torenia fournieri (edentula) compacta coelestina.

7181. Beta chilensis carmoisin-chamoisi.

7182. Adansonia digitata.

7183. Amaranthus caudatus.

7184. Lychnis coeli-rosa.

7185. Primula obconica grandiflora rosea.

7186. Papaver bracteatum.

7187. Torenia fournieri (edentula) grandiflora coelestina.

7188. Rheum palmatum tanguticum.

7189. Phormium tenax veitchii.

7190. Jatropha glauca (?)

7191. Ficus macrophylla.

7192. Quassia amara.

7193. Cinchona succirubra.

7194. Lindelofia spectabilis.

7195. Chrysanthemum maximum.

7196. Campanula persicifolia coerulea.

7197. Torenia fournieri speciosa.
The Bride.

7198. Carica papaya pyriformis.

7199. Beta brasiliensis (?). White.

7200. Antirrhinum majus nanum album.

7201. Antirrhinum majus sulphureum rubro-venosum.

7202. (Blank. Omitted unintentionally.)

7203. Antirrhinum majus nigro purpureum.

7204. Antirrhinum majus insigne.

7205. Clitoria ternatea.

7146 to 7340—Continued.

7206. CAESALPINIA SAPPAN. **Sappan.**

7207. GAILLARDIA AMBLYODON.

7208. ANTIRRHINUM MAJUS GRANDIFLORUM ALBUM.

7209. CARICA PAPAYA ATROVIOLACEA ELEGANTISSIMA.

7210. STRYCHNOS NUX-VOMICA.

7211. PRIMULA OBCONICA KERMESINA.

7212. PITHECOLOBIUM PRUINOSUM.

7213. ANTIRRHINUM MAJUS.

Romeo.

7214. RHEUM PALMATUM TYPICUM.

7215. ACANTHUS NIGER.

7216. GAILLARDIA PULCHELLA LORENZIANA.

7217. TORENIA FOURNIERI.

7218. PHLOX DRUMMONDII ALBA OCULATA SUPERBA.

7219. GAILLARDIA PULCHELLA.

7220. PAPAVER ORIENTALE.

7221. PRIMULA OBCONICA GRANDIFLORA.

7222. FICUS ELASTICA.

7223. CEDRELA ODORATA.

7224. CINCHONA LEDGERIANA.

7225. AQUILEGIA CAERULEA FLORE ALBA.

7226. EUCALYPTUS GLOBULUS.

7227. BERBERIS DARWINII.

7228. IMPATIENS sp.

7229. CINCHONA CALISAYA.

7230. AQUILEGIA CALIFORNICA HYBRIDA.

7231. BEGONIA SEMPERFLORENS VULCAN-VULCAIN.

7232. PHORMIUM TENAX IMPORTIRT GR. IMPORTEÉS.

7233. PRIMULA OBCONICA GRANDIFLORA ALBA.

7234. PHORMIUM TENAX COLENSOI ARG. var.

7235. TORENIA FOURNIERI (EDENTULA) SPECIOSA.

Violetta.

7236. TORENIA FOURNIERI (EDENTULA) SPECIOSA.

7237. STERCULIA ACERIFOLIA.

7238. CEDRELA TOONA.

7239. EUCALYPTUS CITRIODORA.

7240. MUSA SUMATRANA.

7241. TORENIA FOURNIERI (EDENTULA) COMPACTA.

7242. AQUILEGIA CAERULEA.

7243. JATROPHA MANIHOT.

7244. CHRYSANTHEMUM sp.

7245. CINCHONA HYBRIDA.

7246. JATROPHA CURCAS.

7247. CARICA CANDAMARCENSIS.

7248. CENTAUREA AMERICANA.

7249. GAILLARDIA PICTA MARGINATA ALBA.

7250. PAPAVER ORIENTALE SEMIPLENUM.

7251. PAPAVER ORIENTALE PARKINANSII.

7252. PAPAVER ORIENTALE.

Prince of Orange.

7253. PAPAVER BRACTAETUM NANUM SPLENDENS.

7254. STERCULIA ACERIFOLIA.

7255. PITHECOLOBIUM UNGUIS-CATI.

7256. CEDRELA SINENSIS.

7257. JATROPHA MULTIFIDA.

7258. AQUILEGIA CHRYSANTHA.

7146 to 7340—Continued.

7259. Musa martini (?)

7260. Musa rosacea.

7261. Musa superba.

7262. Musa rosacea.

7263. Phormium tenax.

7264. Impatiens sultani hybrida nana.

7265. Primula obconica grandiflora hybrida.

7266. Caesalpinia pulcherrima.

7267. Caesalpinia coriaria.

7268. Sterculia diversifolia.

7269. Acanthus candelabrum (?)

7270. Laurus canariensis.

7271. Pterocarya caucasica.

7272. Bombax ochroma (?)

7273. Chamaerops arborea (?)

7274. Chamaerops canariensis (?)

7275. Raphis cochinchinensis.

7276. Chamaerops elegans (?)

7277. Trachycarpus excelsus.

7278. Chamaerops farinosa.

7279. Chamaerops humilis.

7280. Chamaerops humilis argentea.

7281. Chamaerops macrocarpa.

7282. Chamaerops olivaeformis (?)

7283. Chamaerops robusta (?)

7284. Chamaerops tomentosa.

7285. Phoenix dactylifera.

7286. Jubaea spectabilis.

7287. Kentia alexandria (?)

7288. Hyphaene benguelensis.

7289. Elaesis guineensis.

7290. Raphia pedunculata.

7291. Pistacia terebinthus.

7292. Acrocomia sclerocarpa.

7293. Livistona jenkinsiana.

7294. Anacardium occidentale.

7295. Musa ensete.

7296. Phoenix reclinata.

7297. Erythea edulis.

7298. Thrinax barbadensis.

7299. Livistona australis.

7300. Chamaedorea corallina (?)

7301. Chamaedorea ernesti augusti.

7302. Chamaedorea geonomaeformis.

7303. Chamaedorea gracilis.

7304. Livistona altissima.

7305. Livistona rotundifolia.

7306. Sterculia platanifolia.

7307. Campanula persicifolia flore albo pleno.

7308. Campanula persicifolia grandiflora alba.

7309. Campanula persicifolia grandiflora alba gigantea.

7310. Campanula persicifolia caeruleo pleno.

7311. Begonia semperflorens atropurpurea compacta.

7312. Begonia semperflorens flore pleno.

Bijo des Jardin.

7313. Begonia semperflorens grandiflora atropurpurea.

7146 to 7340—Continued.

7314. PRIMULA OBCONICA GRANDIFLORA FIMBRIATA.

7315. PRIMULA OBCONICA GRANDIFLORA VIOLACEA.

7316. AQUILEGIA FLABELLATA NANA ALBA.

7317. AQUILEGIA GRANDULOSA.

7318. AQUILEGIA HAYLODGENSIS.

7319. AQUILEGIA SKINNERI.

7320. AQUILEGIA STUARTI (?)

7321. AQUILEGIA VERVAENEANA FOL. VAR.

7322. HYDRIASTELE WENDLANDIANA.

7323. THRINAX ALTISSIMA.

7324. ACANTHUS MOLLIS.

7325. CAESALPINIA SEPIARIA.

7326. PYRETHRUM ROSEUM HYBRIDUM (?)

7327. BOCCONIA FRUTESCENS.

7328. CARICA PAPAYA.

7329. ACANTHUS MOLLIS.

7330. BERBERIS WALLICHIANA.

7331. CORYPHA ELATA.

7332. LIVISTONA AUSTRALIS MACROPHYLLA.

7333. ULEX EUROPAEUS.

7334. CERATONIA SILIQUA.

7335. PISTACIA VERA. **Pistache.**

7336. PISTACIA LENTISCUS. **Mastic.**

7337. PINANGA DECORA (?)

7338. THRINAX ARGENTEA.

7339. COCOS ROMANZOFFIANA.

7340. PANDANUS AQUATICUS.

7341. LUPINUS HIRSUTUS. **Blue lupine.**

From Vomero, near Naples, Italy. Received through Mr. C. Sprenger, August 13, 1901.

Used as an ornamental plant, also valued for fodder and as a green manure.

7342 to 7365.

From London, England. Received through Mr. William Bull, August 14, 1901.

A collection of plants, as follows (the nomenclature is in the main that given by Mr. Bull):

7342. JASMINUM NITIDUM.

7343. LICUALA MUELLERI.

7344. CAMOENSIA MAXIMA.

7345. CEROPEGIA WOODI.

7346. CODIAEUM VARIEGATUM.
Croton broomfieldii.

7347. CODIAEUM VARIEGATUM.
Croton excurrens.

7348. CODIAEUM VARIEGATUM.
Croton insignis.

7349. CODIAEUM VARIEGATUM.
Croton memphis.

7350. CODIAEUM VARIEGATUM.
Croton sceptre.

7351. CODIAEUM VARIEGATUM.
Croton elysian.

7352. CODIAEUM VARIEGATUM.
Croton elvira.

7353. CODIAEUM VARIEGATUM.
Croton euterpe.

7354. CODIAEUM VARIEGATUM.
Croton hermon.

7355. FICUS RADICANS VARIEGATA.

7356. FICUS INDICA.

7342 to 7365—Continued.

7357. CINCHONA OFFICINALIS. **Peruvian bark.**

7358. CALODENDRUM CAPENSIS. **Cape chestnut.**

7359. HIBISCUS ELATUS.

7360. PSYCHOTRIA (?) IPECACUANHA. **Ipecacuanha.**

7361. KICKSIA AFRICANA. **Lagos rubber.**

7362. SALVADORA PERSICA. **Mustard tree of Scripture.**

7363. EPIPREMNUM MIRABILE. **Tonga.**

7364. ANTIARIS TOXICARIA. **Upas tree.**

7365. STANGERIA PARADOXA.

7366. ANANAS SATIVUS. **Pineapple.**

From West Palmbeach, Fla. Received from Mr. George C. Matthams, August 13, 1901.

Ripley Queen.

7367 to 7396.

From Mexico. Received through Dr. J. N. Rose (Nos. 270–299), August 15, 1901.

A collection of Mexican plants and bulbs, as follows (Doctor Rose's numbers are retained for identification):

7367. TILLANDSIA sp.
(No. 270.)

7368. COTYLEDON sp.
(No. 271.)

7369. COTYLEDON sp.
(No. 272.)

7370. COTYLEDON sp.
(No. 273.)

7371. AGAVE sp.
(No. 274.)

7372. AGAVE sp.
(No. 275.)

7373. COTYLEDON sp.
(No. 276.)

7374. COTYLEDON sp.
(No. 277.)

7375. (No. 278.) **Cactus.**
Flat-spined.

7376. (No. 279.) **Cactus.**
Long-spined.

7377. (No. 280.) **Cactus.**
Round.

7378. (No. 281.) **Cactus.**
Four-spined.

7379. OPUNTIA sp.
(No. 282.)

7380. MAMILLARIA sp.
(No. 283.)
Oblong.

7381. MAMILLARIA sp.
(No. 284.)
Round.

7382. (No. 285.) **Cactus.**
Tall.

7367 to 7396—Continued.

7383. Cissus sp. (No. 286.)

7384. Tillandsia sp. (No. 287.)

7385. Tillandsia sp. (No. 288.)

7386. Tillandsia sp. (No. 289.)

7387. Hechtia sp. (No. 290.)

7388. Fouquieria sp. (No. 291.)

7389. (No. 292.)

7390. Cotyledon sp. (No. 293.)

7391. Nolina sp. (No. 294.)

7392. Yucca sp. (No. 295.)

7393. Zephyranthes sp. (No. 296.)

7394. Cotyledon sp. (No. 297.)

7395. Solanum sp. (No. 298.) **Potato.**

Half-wild potatoes from Mount Orizaba.

7396. Solanum sp. (No. 299.) **Potato.**

A small wild potato from near City of Mexico.

7397. Cucumis melo. **Muskmelon.**

From Savannah, Ga. Received through Mr. D. G. Purse, president of the Savannah Board of Trade, August 17, 1901.

Seeds from a 32-pound muskmelon.

7398. Amygdalus communis. **Almond.**

From Malaga, Spain. Received through Mr. D. G. Fairchild (No. 765), August 19, 1901.

Jordan. "Bud sticks of the famous *Jordan* almond of commerce, which is imported into America in large quantities every year. These bud sticks were taken before the almonds were harvested in almost all cases, and from trees still bearing the *Jordan* almonds. They were difficult to obtain, and it is hoped can be grafted this autumn. This variety is without question the finest almond of its class in the world. It is exported from Spain, largely as shelled kernels, to England and the United States, and is used extensively in these places for the manufacture of confectionery. Its typical long, plump shape distinguishes it from any other sort grown in Spain. It has a very thin, delicate skin and fine, white, highly flavored flesh. There are orchards of considerable size in Spain of this variety, but as a rule the trees are scattered irregularly over the hillsides among the Sierras back of Malaga. A famous locality for them is at Alora, a half hour's railroad ride from Malaga. No special care is given the trees and many of the orchards are quite old. The soil on which they are grown is a light gravel, not fitted for any other culture. In summer it gets exceedingly dry, but the trees seem to withstand the drought very well." (*Fairchild.*)

7399 and 7400. Ceratonia siliqua. **Carob.**

From Malaga, Spain. Received through Mr. D. G. Fairchild (No. 766), August 19, 1901.

Castillana. "One of the best varieties of carob, or St. John's bread, in Spain, and probably one of the best in the world. It is eaten by the natives in the same way that the variety *Vera* is in the region of Alicante. It has a very thick, medium-sized pod, which is very sweet. Produces abundantly and is not grafted with the male variety, as in Alicante." (*Fairchild.*) See No. 7132.

7401. Amygdalus communis. **Almond.**

From Malaga, Spain. Received through Mr. D. G. Fairchild (No. 771), August 20, 1901.

Jordan. "Bud sticks from the garden of Cristobal Paloma, of Malaga. These are probably like the former buds of this same variety, but are forwarded to make sure of getting the best strains." (*Fairchild.*)

7402 to 7413.

From Mexico. Received through Dr. J. N. Rose, August 20, 1901.

A collection of native plants, bulbs, and seeds, as follows (the numbers given by Doctor Rose are retained for identification):

7402. ZEPHYRANTHES sp. (No. 268.)

7403. COTYLEDON sp. (No. 300.)

"Large red flowers." (*Rose.*)

7404. ARGEMONE sp. (No. 301.)

"Large white flowers." (*Rose.*)

7405. ZEPHYRANTHES sp. (No. 302.)

7406. CUCURBITA sp. (No. 5287.)

7407. RUBUS sp. (No. 5380.)

"A beautiful flowering shrub." (*Rose.*)

7408. PITHECOLOBIUM sp. (No. 5840.)

"A shrub." (*Rose.*)

7409. CUCURBITA sp. (No. 5899 ?.)

7410. SOLANUM sp. (No. 5944.)

"Large purple flowers." (*Rose.*)

7411. SPHAERALCEA sp. (No. 5945.)

"A large, beautiful flowering shrub much used in Mexican parks." (*Rose.*)

7412. OXALIS sp. (No. 5956.)

7413. [Undetermined.] (No. 303.)

"Forty-nine bulbs of a beautiful white flowering water lily. The flowers stand up above the water." (*Rose.*)

7414 to 7421.

From Naples, Italy. Received from Dammann & Co., August 20, 1901.

A collection of seeds as follows (the nomenclature is in large part Dammann's):

7414. ANACARDIUM OCCIDENTALE.

7415. INGA DULCIS.

7416. TRACHYCARPUS EXCELSUS.

7417. FICUS ELASTICA.

7418. FICUS MACROPHYLLA.

7419. GAZANIA HYBRIDA.

Nora.

7420. GAZANIA HYBRIDA.

Diana.

7421. GAZANIA HYBRIDA.

Blondine.

7422. TRITICUM sp. **Wheat.**

From Girgeh Province, Egypt. Received through Mr. D. G. Fairchild (No. 655), August 20, 1901.

"Selected Egyptian wheat secured through the kindness of Sir William Willcocks, from typical 'basin' irrigated lands of the upper Nile. This is especially for trial in the Colorado Desert experiments. It is a winter wheat in Egypt, but matures by the first (or middle at latest) of May. Probably will be more or less mixed and contain both hard and soft varieties." (*Fairchild.*)

7423. CORYLUS AVELLANA.

From Alicante, Spain. Received through Mr. D. G. Fairchild (No. 752), August 30, 1901.

"Sample seeds of what are called here on the market 'Avellinas.' They are grown near Valencia, I am told, and are one of the common sorts of hazelnuts. It is a fairly thin-shelled nut but its skin is flakey and too heavy to make it of first quality." (*Fairchild.*)

7424. CYPERUS ESCULENTUS. **Chufas.**

From Alicante, Spain. Received through Mr. D. G. Fairchild (No. 753), August 30, 1901.

"Sample of the 'Chufa' of Spain, for planting in Louisiana and other places in the South. The culture is said to be simple and lucrative in Spain. When soaked in water the rootstocks swell up and are then very sweet and palatable. They are sold as we sell peanuts on the streets. Children are very fond of them, and they are used very extensively in the manufacture, in Madrid, of a delicious ice called '*Horchata di Chufas.*'" (*Fairchild.*)

7425. TRITICUM DURUM. **Wheat.**

From Cordova, Spain. Received through Mr. D. G. Fairchild (No. 764), August 30, 1901.

Negro. "A black-bearded durum wheat grown largely about Cordova. It is called *Negro* simply, but I believe is the *Barba Negro*, from which the *Pelissier* wheat is said to have originated. None of these wheats are much exported, and it is impossible to determine here their macaroni-making properties." (*Fairchild.*)

7426. VICIA FABA. **Broad bean.**

From Alicante, Spain. Received through Mr. D. G. Fairchild (No. 755), August 30, 1901.

Mahonesas. "A variety of broad bean, preferred for boiling purposes by Alicantians. Comes from Mahon in the Balearic Islands." (*Fairchild.*)

7427. HORDEUM TETRASTICHUM. **Barley.**

From Albacete, Spain. Received through Mr. D. G. Fairchild (No. 761). Sample received August 21, 1901; 88 kilos received January 14, 1902.

Albacete. "The barley of this dry plateau region of southeastern Spain is used for brewing purposes. Although its quality for this purpose can not compare with the best *Hanna* barley, it is a good variety and worthy of trial by breeders in the southwest." (*Fairchild.*)

7428. TRITICUM DURUM. **Wheat.**

From Albacete, Spain. Received through Mr. D. G. Fairchild (No. 758), January 14, 1902.

"This is the ordinary durum wheat of this dry plateau. It is not, I am told by a dealer in Murcia, as 'strong' a variety as the Russian so-called *Taganrog*, and hence is not exported, but from what I saw of it I judge it will prove resistant to rust in a fairly high degree. No distinctive name was discoverable. It is the only hard variety." (*Fairchild.*)

7429. TRITICUM VULGARE. **Wheat.**

From Albacete, Spain. Received through Mr. D. G. Fairchild (No. 759), January 14, 1902.

Candial. "A soft variety of wheat grown on this dry plateau in southeastern Spain. This variety is very highly esteemed as a bread-making sort for home use. It may prove valuable for our dry southern plains, for it is grown without irrigation. It is quite distinct from the variety known by the name of Candeal in South America, being a soft wheat, while the South American kind is a hard wheat." (*Fairchild.*)

7430. TRITICUM DURUM (?) **Wheat.**

From Albacete, Spain. Received through Mr. D. G. Fairchild (No. 760), January 14, 1902.

Gejar. "A semihard wheat, which is said to be the best for the manufacture of macaroni of any in Spain. It is not so 'strong' as the *Taganrog*, I am told, but has a very fine gluten, which makes it sought after by Spanish macaroni makers. It is grown on the high plateau of southeastern Spain without irrigation, and is suited for trial in the southwest." (*Fairchild.*)

7431 to 7438. MORUS sp. **Mulberry.**

From Murcia, Spain. Received through Mr. D. G. Fairchild (No. 757, f, g, h, i, j, k, l, m, n), August 21, 1901.

Various species of mulberry for silkworm feeding. All dead except:

7431. *Alba nervosa.* (757 f.)

7436. *Fertil de Italia.* (757 l.)

(See Nos. 7141 to 7145.)

7439. AGAVE UNIVITATTA. **Lechuguilla.**

From Tamaulipas, Mexico. Received through Mr. L. H. Dewey, August 31, 1901. Presented by Mr. H. Riehl.

A Tampico fiber plant.

7440. PUNICA GRANATUM. **Pomegranate.**

From the island of Chios, Turkey. Presented by Mr. N. J. Pantelides, through Mr. D. G. Fairchild. Received August 23, 1901.

"Scions of a variety of pomegranate which has seeds that are very tender coated. Probably a similar variety to that commonly cultivated on the coast of Spain and considered the best market variety there." (*Fairchild.*)

7441 to 7445.

From Nice, France. Presented by Mr. A. Robertson-Proschowsky. Received August 23, 1901.

A collection of seeds as follows:

7441. TRACHYCARPUS EXCELSUS.

7442. PHOENIX RECLINATA.

7443. PHOENIX.

Hybrid pollinated with *P. reclinata.*

7444. PHOENIX PUMILA.

Pollinated with *P. reclinata.*

7445. PSIDIUM CATTLEYANUM.

7446.

From Mexico. Received through Dr. J. N. Rose (No. 304), August 24, 1901.

7447.

From Mexico. Received through Dr. J. N. Rose (No. 305), August 24, 1901.

7448. CAPSICUM ANNUUM. **Red pepper.**

From Alicante, Spain. Received through Mr. D. G. Fairchild (No. 754), August 21, 1901.

"A very fine variety of red pepper grown at Aspra, not far from Elche, near Alicante. It forms a showy object in the market place and is grown extensively." (*Fairchild.*)

7449. PIMPINELLA ANISUM. **Anise.**

From Alicante, Spain. Received through Mr. D. G. Fairchild, August 24, 1901.

"The anise seed of southeastern Spain is noted. One firm here has exported 40,000 '*vielas*' in a single year. Used in Amsterdam for the manufacture of anisette." (*Fairchild.*)

7450. AVENA SATIVA. **Oat.**

From Alicante, Spain. Received through Mr. D. G. Fairchild, August 24, 1901.

"Sample of oats from market." (*Fairchild.*)

7451. HORDEUM VULGARE. **Barley.**

From Alicante, Spain. Received through Mr. D. G. Fairchild, August 24, 1901.

"Sample of barley from market." (*Fairchild.*)

7452 to 7458. AMYGDALUS COMMUNIS. **Almond.**

From Alicante, Spain. Received through Mr. D. G. Fairchild, August 24, 1901.

Almond fruits as follows:

7452.

Mollar. From same tree as No. 7061.

7453.

Planeta. From same tree as No. 7134.

7454.

Castillet. From same tree as No. 7133.

7455.

Fabrica. From same tree as No. 7135.

7456.

Planeta. From a grower.

7457.

Planeta. From a grower.

7458.

Pastaneta. From a grower.

7459. TRITICUM DURUM. **Wheat.**

From near Alicante, Spain. Received through Mr. D. G. Fairchild, August 24, 1901.

"Sample of wheat from threshing floor." (*Fairchild.*)

7460. CERATONIA SILIQUA. **Carob.**

From Alicante, Spain. Received through Mr. D. G. Fairchild (No. 743), August 24, 1901.

Negra. Seed pods from same tree as cuttings. (No. 7063.)

7461. CERATONIA SILIQUA. **Carob.**

From Alicante, Spain. Received through Mr. D. G. Fairchild, (No. 744) August 24, 1901.

Vera. "Seed pods. This is said to be one of the sweetest varieties known. It is planted for table use especially and is too valuable for horse food. The yield is irregular and small compared with other sorts." (*Fairchild.*)

7462. CICER ARIETINUM. **Chick-pea.**

From Cordova, Spain. Received through Mr. D. G. Fairchild, August 24, 1901.

7463. TRITICUM DURUM. **Wheat.**

From Alicante, Spain. Received through Mr. D. G. Fairchild (No. 763), August 24, 1901.

Berberisco. "A variety of wheat which was introduced into Spain many years ago from Barbary, and which has won for itself the reputation of being a larger yielder and having better grain than the durum wheat *Blanco*, No. 7464. It would be interesting to try this in comparison with Algerian wheats, which are said to have originated (part of them at least) from imported Spanish sorts." (*Fairchild.*)

7464. TRITICUM DURUM. **Wheat.**

From Cordova, Spain. Received through Mr. D. G. Fairchild (No. 762), August 24, 1901.

Blanco. "A native variety of hard wheat grown about Cordova which has the reputation of being of a fair quality and, although not so productive as the so-called *Berberisco*, it is more resistant to drought. I believe it will also prove resistant to rust in a fair degree." (*Fairchild.*)

7465. TRITICUM DURUM. **Wheat.**

From Uralsk, Russia. Received through Mr. A. A. Vannohin, August 29, 1901.

Kubanka. (See No. 5639, Inventory No. 10.)

7466. TRITICUM VULGARE. **Wheat.**

From Padui, Russia. Received through Mr. M. Narishkin, August 29, 1901.

Padui. (See No. 5640, Inventory No. 10.)

7467. TRITICUM VULGARE. **Wheat.**

From Kharkof, Russia. Received through Dr. A. Boenicke, August 29, 1901.

Kharkof. (See No. 5641, Inventory No. 10.)

7468. GARCINIA MANGOSTANA. **Mangosteen.**

From Heneratgoda, Ceylon. Received through J. P. William & Bros., August 29, 1901.

7469 to 7490.

From Mexico. Received through Dr. J. N. Rose (Nos. 306 to 327), August 30, 1901.

A collection of Mexican plants and bulbs as follows (Doctor Rose's numbers are given for purposes of identification):

7469. **Orchid.**

(No. 306.)

7470. **Orchid.**

(No. 307.)

7471. **Orchid.**

(No. 308.)

7472. **Orchid.**

(No. 309.)

7469 to 7490—Continued.

7473. **Orchid.**

(No. 310.)

7474. **Orchid.**

(No. 311.)

7475. **Orchid.**

(No. 312.)

7476. **Orchid.**

(No. 313.)

7477. **Orchid.**

(No. 314.)

7478. **Orchid.**

(No. 315.)

7479. COTYLEDON sp.

(No. 316.)

7480. ARUM sp. (?).

(No. 317.)

7481. TILLANDSIA sp.

(No. 318.)

7482. TILLANDSIA sp.

(No. 319.)

7483. TILLANDSIA sp.

(No. 320.)

7484. TILLANDSIA sp.

(No. 321.)

7485. ZEPHYRANTHES sp.

(No. 322.)

7486. TILLANDSIA sp.

(No. 323.)

7487. COTYLEDON sp.

(No. 324.)

7488. AGAVE sp.

(No. 325.)

7489. SOLANUM sp. **Potato.**

(No. 326.)

7490.

(No. 327.)

7491 to 7495.

From Mexico. Received through Dr. J. N. Rose (Nos. 6259 and 328 to 331), August 31, 1901.

A collection of Mexican plants and bulbs, as follows:

7491.

(No. 6259.)

7492.

(No. 328.)

7493.

(No. 329.)

7494.

(No. 330.)

7495.

(No. 331.)

7496. CISSUS.

From Eagle Pass, Tex. Received through Dr. J. N. Rose, September 5, 1901.

7497.

From Mexico. Received through Dr. J. N. Rose (No. 259), September 5, 1901.

7498. VICIA FABA. **Broad bean.**

From Vomero-Naples, Italy. Received through Mr. C. Sprenger, September 5, 1901.

St. Pantaleone. "A new variety of bean having very long pods." (*Sprenger.*)

7499. ANACARDIUM OCCIDENTALE. **Cashew.**

From Kingston, Jamaica. Received through Mr. W. Harris, assistant superintendent of the Hope Gardens, September 5, 1901.

7500. MEDICAGO SATIVA. **Alfalfa.**

From Oued Rirh oasis, northern Sahara Desert. Received through Mr. W. T. Swingle from French and Arab foremen of the European date plantations. Received May, 1901.

"An early sort, resisting drought and alkali much better than the ordinary alfalfa." (*Swingle.*)

7501. SPONDIAS sp. **Ciruela.**

From Iguala, Mexico. Received through Mr. Elmer Stearns, Los Angeles, Cal., September 10, 1901.

Dried fruit.

7502. ZEA MAYS. **Corn.**

From Tampico, Mexico. Received through Mr. Elmer Stearns, Los Angeles, Cal., September 10, 1901.

Large White Mexican.

7503. PHASEOLUS VULGARIS. **Bean.**

From City of Mexico, Mexico. Received through Mr. Elmer Stearns, Los Angeles, Cal., September 10, 1901.

Large Purple.

7504. PHASEOLUS VULGARIS. **Bean.**

From City of Mexico, Mexico. Received through Mr. Elmer Stearns, Los Angeles, Cal., September 10, 1901.

Ballo Gordo. A yellow bean.

7505. CASIMIROA EDULIS. **White sapota.**

From Guadalajara, Mexico. Received through Mr. Elmer Stearns, Los Angeles, Cal., September 10, 1901.

Zapote Blanco.

7506. (Unidentified seeds.)

From City of Mexico, Mexico. Received through Mr. Elmer Stearns, Los Angeles, Cal., September 10, 1901.

Pepita para mole verde. "Sold in roasted condition on streets of Mexico." (*Stearns.*)

7507. OPUNTIA sp.

From City of Mexico, Mexico. Received through Mr. Elmer Stearns, Los Angeles, Cal., September 10, 1901.

Tuna Colorado. "Fruit is the size of a duck's egg, and has very red flesh." (*Stearns.*)

7508. CUCURBITA sp. **Pumpkin.**

From City of Mexico, Mexico. Received through Mr. Elmer Stearns, Los Angeles, Cal., September 10, 1901.

Spargel Kurbis.

7509. CEREUS sp. (?) **Pitahaya.**

From Tampica and Guadalajara, Mexico. Received through Mr. Elmer Stearns, Los Angeles, Cal., September 10, 1901.

"Fruit pink, large, sweet, and fine eating." (See Cont. U. S. Herb., Vol. V, No. 4, pp. 220-221.)

7510. CARICA PAPAYA. **Papaw.**

From Tampico, Mexico. Received through Mr. Elmer Stearns, Los Angeles, Cal., September 10, 1901.

"Fruit very large." (*Stearns.*)

7511. CUCUMIS SATIVUS (?). **Cucumber.**

From City of Mexico, Mexico. Received through Mr. Elmer Stearns, Los Angeles, Cal., September 10, 1901.

"Fruit of fine flavor, round, the size of a large apple. Bears large crop." (*Stearns.*)

7512 to 7515. TRITICUM VULGARE. **Wheat.**

From Proskurow, Russia. Received through Dr. S. Mrozinski, September 9, 1901.

Samples of wheat as follows:

7512.

Sandomirka. "A beardless wheat grown in Podolia. It is very resistant to frost, heat, and drought. This wheat was first grown in the vicinity of Sandomir, in Poland." (*Mrozinski.*)

7513.

Plock. "A variety of wheat introduced into Podolia from Plock, Poland. It is especially noted for its resistance to the effect of rain storms." (*Mrozinski.*)

7514.

Triumph of Podolia. "An improved local species, very productive and resistant to all climatic changes." (*Mrozinski.*)

7515.

Banat. "Selected from the original Hungarian *Banat.* It is noted for not degenerating as easily as the original." (*Mrozinski.*)

7516 and 7517. AMYGDALUS COMMUNIS. **Almond.**

From Malaga, Spain. Received through Mr. D. G. Fairchild (No. 769), September 13, 1901.

Jordan. "Bought in the shell from a grower in the Sierra, at a small village called Almogia, one hour's mule ride from the well-known road of Antiquera. This is a collection as it came from the trees, small and large together, and is for purposes of seed selection. It is highly probable that new varieties (seedlings) can be secured from these seeds, and they should be distributed to breeders of *Prunus.* Almost all the trees about Malaga, where this particular variety is grown and from which place almonds are shipped in large quantities to America, are budded trees. The stock is the bitter almond, seeds of which (No. 7517) are included in the same box with the Jordans. I am told, however, that seedling plants are employed and that they bear fruit reasonably true to type. The soil on which these trees are grown is very rocky and light and at this season is quite dry and dusty. Hillsides and high-lying valleys are the favorite spots for their cultivation, and the secret of their culture seems to lie in the freedom from spring frosts. They flower in January and February, and even about Malaga a crop is often lost by a frost at flowering time. These frosts being quite local, one often hears in one valley of a total loss of the crop in a neighboring one. These seeds may prove very valuable in originating later-blooming sorts of good quality and in discovering valleys suited to their culture. The seed should be carefully inspected and all specimens with gum adhering discarded. I recommend, further, that the remaining be washed with copper sulphate or some other disinfectant and well rinsed with fresh water. The disease called *Gummosis* is a troublesome one and exists in all the orchards I have visited. It is important that this disease, if it really is one, be not introduced into California. I am unaware if it is already there and has been studied. I have seen trees that appeared to be dying of the disease. Nuts attacked by it are worthless. These seeds should be stratified and planted without cracking in rich garden earth. Budding is done here only in April." (*Fairchild.*)

7518. ROMNEYA COULTERI. **Matilija poppy.**

From Los Angeles, Cal. Received through Mr. Elmer Stearns, September 20, 1901.

7519. CEREUS sp. (?) **Pitahaya.**

From Guadalajara, Mexico. Received through Mr. Elmer Stearns, Los Angeles, Cal., September 20, 1901.

"Fruit three to four inches long and two inches in diameter. Skin reddish pink. Pulp white and jellylike, with the seeds distributed through it. Sweet and fine eating." (*Stearns.*)

7520 to 7534.

From Paris, France. Received through Vilmorin-Andrieux & Co., September 21, 1901.

A collection of agricultural seeds, as follows:

7520. TRIGONELLA FOENUM-GRAECUM. **Fenugreek.**

7521. LATHYRUS CICER. **Vetch.**

Gesse jarosse.

7522. ERVUM MONANTHOS. **Lentil.**

One-flowered lentil.

7523. ERVUM LENS HIEMALE. **Lentil.**

Red winter lentil.

7524. LUPINUS ALBUS. **Lupine.**

White lupine.

7525. LUPINUS LUTEUS. **Lupine.**

Yellow lupine.

7526. ONOBRYCHIS ONOBRYCHIS. **Sainfoin.**

7527. ONOBRYCHIS ONOBRYCHIS. **Sainfoin.**

Sainfoin à deux coupes.

7528. HEDYSARUM CORONARIUM. **Sulla.**

Spanish Sulla.

7529. TRIFOLIUM INCARNATUM. **Crimson clover.**

Early variety.

7520 to 7534—Continued.

7530. Trifolium incarnatum. **Crimson clover.**

Very late variety, with white flowers.

7531. Secale cereale. **Rye.**

Giant winter.

7532. Vicia narbonnensis. **Narbonne vetch.**

7533. Vicia villosa. **Hairy vetch.**

7534. Lathyrus ochrus. **Vetch.**

7535. Lupinus angustifolius. **Blue lupine.**

From Eustis, Fla. Sent by Mr. F. W. Savage through Mr. W. T. Swingle. Received September 23, 1901.

A North African variety. Grown from No. 5583.

7536 to 7556.

From Paris, France. Received through Vilmorin Andrieux & Co., September 23, 1901.

A collection of seeds as follows:

7536. Albizzia julibrissin (?)

7537. Morus alba. Hat-var. Moretti.

7538. Schinus molle.

7539. Schinus terebinthifolius.

7540. Ficus elastica.

7541. Caesalpinia bonducella.

7542. Hura crepitans.

7543. Swietenia mahagoni.

7544. Coluifera balsaminum.

7545. Arenga saccharifera.

7546. Cycas normanbyana.

7547. Licuala grandis.

7548. Livistona jenkinsiana.

7549. Cinchona calisaya.

7550. Cinchona ledgeriana.

7551. Cinchona calisaya.

7552. Cinchona succi-rubra.

7553. Lespedeza sieboldi.

7554. Ilex integra.

7555. Abrus precatorius.

7556. Leucadendron argenteum.

7557 to 7574.

From St. Albans, England. Received through Sander & Co., September 24, 1901.

A collection of plants as follows:

7557. Richardia sp.

Calla leucoxantha.

7558. Leea sambucina.

7559. Panax aureum.

7560. Passiflora pruinosa.

7561. Dianthus caryophyllus. **Carnation.**

Ivanhoe.

7557 to 7574—Continued.

7562. Dianthus caryophyllus. **Carnation.**
J. Coles.

7563. Dianthus caryophyllus. **Carnation.**
Lily Measures.

7564. Dianthus caryophyllus. **Carnation.**
Mrs. F. Sander.

7565. Dianthus caryophyllus. **Carnation.**
Monica.

7566. Dianthus caryophyllus. **Carnation.**
Mrs. Joicey.

7567. Richardia sp.

Calla Elliottiana Rossii.

7568. Acanthophoenix crinita.

7569. Bentinckia nicobarica.

7570. Cocos coronata.

7571. Cyrtostachys renda.

7572. Heterospathe elata.

7573. Ptychoraphis augusta.

7574. Kentia sanderiana.

7575 and 7576. Triticum durum. **Wheat.**

Grown by Oscar C. Snow, Mesilla Park, N. Mex., under contract. Distributed from the New Mexico Agricultural Experiment Station. Reported ready for delivery September, 1901.

7575. *Gharnovka,* grown from No. 5643.

7576. *Kubanka,* grown from No. 5639.

7577. Physalis peruviana. **Cape gooseberry.**

From Lima, Peru. Received through Mr. Elmer Stearns, Los Angeles, Cal., September 26, 1901.

Naranjilla. "Plant 2 to 3 feet tall, branching, leaves large. Fruits abundant. The local name means Little Orange." (*Stearns.*)

7578. Triticum durum. **Wheat.**

From province of Oran, Algeria. Received through Messrs. D. G. Fairchild and C. S. Scofield (No. 721), September 26, 1901.

Marouani. "This wheat is cultivated extensively on the elevated rolling lands in the western part of the province, and is one of the best of the types of durum wheats cultivated by the Arabs. The quantity obtained is from the estate of M. J. Labouresse, at Tessala, near Sidi-bel-Abbès. It has been carefully selected by Mr. Labouresse from year to year until a fairly pure and very vigorous stock has been obtained. The variety is very hardy, resistant to rust, and succeeds fairly well under rather droughty conditions. The grain is especially adapted for the manufacture of semolina. In the province of Oran the wheat is sown in November and ripens in June, but it might succeed as a spring wheat in the spring-wheat region of the northern United States." (*Fairchild and Scofield.*)

7579. Triticum durum. **Wheat.**

From Sidi-bel-Abbès, province of Oran, Algeria. Received through Messrs. D. G. Fairchild and C. S. Scofield (No. 722), September 26, 1901.

Medeah. "This is one of the best-known macaroni wheat varieties of western Algeria. When grown on the high rolling lands in the vicinity of the city of Medeah it produces a grain with very valuable macaroni-making qualities. It was recently introduced into the vicinity of Sidi-bel-Abbès, where it gives promise of being a very valuable sort, ripening ten to fifteen days earlier than the Marouani and similar sorts grown in that vicinity. It is ordinarily sown here in November and ripens early in June, but it is worth trying as a spring wheat in the northern United States. The sample obtained is from the farm of M. J. Labouresse, of Tessala, near Sidi-bel-Abbès, which latter is one of the noted wheat growing districts of Algeria, possessing a light rich soil." (*Fairchild and Scofield.*)

7580. TRITICUM DURUM. **Wheat.**

From Batna, Constantine, Algeria. Received through Messrs. D. G. Fairchild and C. S. Scofield (No. 729), September 26, 1901.

Adjini. "This wheat is from stock grown by the Arabs on the rolling lands of the Aurès Mountains, east of Batna, where the summer temperature often reaches 100° F. and where it frequently drops to zero in winter. It is a variety highly spoken of by the macaroni manufacturers of Marseille, and, although rapidly deteriorating in quality, when cultivated there, has given very good yields when grown without irrigation on lower lands of the high plateau of the province of Constantine. The soil on these lands is excessively rich in sulphate of magnesia and is of a hard and gravelly nature. Although a winter wheat in Batna, being sown in December or January and harvested early in July, it will be worth a trial in the spring-wheat region. The seed obtained is from Arab growers, whose methods of culture are very primitive, and the Department is indebted to Mr. G. Ryf, manager of the Geneva Society of Setif, for its purchase from them." (*Fairchild and Scofield.*)

7581. TRITICUM DURUM. **Wheat.**

From El-Outaya, Constantine, Algeria. Received through Messrs. D. G. Fairchild and C. S. Scofield (No. 730), September 26, 1901.

Kahla. "This wheat will be found to differ from the *Kahla*, No. 7794, of the high plateau region, as it comes from plants grown by irrigation on the somewhat salty sands of the northern Sahara Desert. It is one of the few sorts of wheats that maintain their good quality when grown year after year in slightly alkaline soils. It is highly valued by the Arabs for its rich content of elastic gluten. It is grown on land that probably has at least 5 per cent of salt in it and the irrigation water itself with which the plants are irrigated is slightly salty, not so salty, however, as to be quite undrinkable. The wheat is planted in El-Outaya in December or January, but it might be worth trying as a spring wheat in the North. This seed is from the farm of Mr. Charles des Places at El-Outaya. As a macaroni wheat its rank is not known, but its ability to grow in alkaline soil makes it especially valuable for any experiments in the irrigated salt lands of America. We were told that a change of seed was especially beneficial on these salt lands. Quantities of wheat are brought down from the neighboring mountains to plant on these salt lands. This change of seed forbids the formation of any salt-resistant race, but does not change the interest in these wheats for other salt lands." (*Fairchild and Scofield.*)

7582. TRITICUM VULGARE. **Wheat.**

From El-Outaya, Constantine, Algeria. Received through Messrs. D. G. Fairchild and C. S. Scofield (No. 731), September 26, 1901.

Fretes. "This variety, sometimes called *Freitiss*, is one of the few soft wheats grown in Algeria. It is particularly noted for its early maturity and is often extensively planted in the Sahara Desert in seasons when the winter rains occur so late that the durum varieties usually grown would not have time to mature. When planted in November, as it is in Algeria, at the same time with durum varieties, it is said to ripen two months in advance of them. The seed obtained was grown on the rather salty desert sands in the vicinity of El-Outaya, north of Biskra, and watered with somewhat alkaline but still drinkable irrigation water. The variety is said to have originated from a shipment of Russian wheat which was made into Algeria at the time of a famine many years ago. Its early maturing qualities attracted attention, and it has been cultivated in small quantities by the Arabs ever since. The seed obtained is from the farm of Mr. Charles B. des Places." (*Fairchild and Scofield.*)

7583. HORDEUM TETRASTICHUM. **Barley.**

From El-Outaya, Constantine, Algeria. Received through Messrs. D. G. Fairchild and C. S. Scofield (No. 732), September 26, 1901.

Beldi. "This and the following variety (No. 7584) are sorts planted on the saline soils of the edge of the Sahara Desert. They are grown by irrigation, but the irrigation water itself is saline. In quality they are neither of them of superior excellence and are little used, if any, for beer-making purposes. The yield is small when compared with that of barley grown on good soils, but it nevertheless seems to pay the French colonists to grow it in these regions where very few plants of any kind succeed. The Arabs feed their horses largely on barley and even eat it themselves. Mr. des Places says, however, that on these saline soils where this barley is grown he finds a change of seed beneficial, even necessary, and he imports every year or two his seed barley and seed wheat from the mountains, because it so rapidly degenerates. These barleys are introduced for a trial on the salt lands of the Southwest. The names given are Arab ones for slightly different strains. Secured of Mr. Charles B. des Places." (*Fairchild and Scofield.*)

7584. HORDEUM TETRASTICHUM. **Barley.**

From El-Outaya, Constantine, Algeria. Received through Messrs. D. G. Fairchild and C. S. Scofield (No. 733), September 26, 1901.

Telli. "A barley for salt lands under irrigation. See No. 7583 for description." (*Fairchild and Scofield.*)

7585. TRITICUM TURGIDUM. **Wheat.**

From Oran, Algeria. Received through Messrs. D. G. Fairchild and C. S. Scofield (No. 734), September 26, 1901.

Black Poulard. "This is one of the so-called Poulard wheats, a class which is commonly grown in France on stiff or heavy soils unfavorable to the culture of less vigorous sorts. The quality of the grain is considered inferior to that of either *T. durum* or *T. vulgare.* It is particularly valuable on account of its vigorous growth and hardiness. It is usually grown as an autumn wheat, but is worthy of trial on any land too heavy or too coarse to produce ordinary wheats to good advantage. The seed was secured from M. Vermeil, professor of agriculture at Oran, who has it growing in his experimental plats under the Arabic name of 'Kahla,' a name which, however, is applied in other parts of Algeria to a quite different variety of wheat. (See Nos. 7581 and 7794.) This is not a macaroni wheat, but may be used for flour making." (*Fairchild and Scofield.*)

7586. MEDICAGO SATIVA. **Alfalfa.**

From Setif, province of Constantine, Algeria. Received through Messrs. D. G. Fairchild and C. S. Scofield (No. 735a), November 11, 1901.

"A wild variety which has been introduced into culture by Mr. G. Ryf, of Setif, who is conducting experiments, the results of which are published by the "Comice Agricole," of Setif, of which Mr. Ryf is a prominent member. This variety has been remarkable in its variation since its introduction to cultivation, and the seed should prove an excellent foundation stock from which to select varieties for special soils and conditions. In general it has been found very resistant to drought and well adapted to soils rich in phosphates. Mr. Ryf has an interesting method of cultivating it. He plants the seed in rows 39 inches apart and cultivates between the rows the first season. The following season the crops of hay are cut as rapidly as they come on, and the plants spread out, forming broad bands or rows. The season following, the space between the rows and all but a narrow band 8 inches wide of the alfalfa is plowed under and well tilled. After this cultivation a crop of wheat is sown between the rows of alfalfa, and when this is matured and removed a light cultivation is given, and the following year the rows of alfalfa are allowed to spread out and crops of hay are taken off. In this way wheat and alfalfa are alternated from year to year. Mr. Ryf finds that by following this method the perennial leguminous forage crops give much better results than annual ones. This he attributes largely to the extra amount of cultivation that this method permits. In fact he finds that for his conditions an extra cultivation of the soil gives better results in the following crop than the planting of an annual leguminous crop, with which cultivation is impossible. This is seed from a procumbent form of the plant." (*Fairchild and Scofield.*)

7587. MEDICAGO SATIVA. **Alfalfa.**

From Setif, Constantine, Algeria. Received through Messrs. D. G. Fairchild and C. S. Scofield (No. 735a), November 11, 1901.

A wild variety, with erect form. (See No. 7586.)

7588. MEDICAGO MEDIA. **Sand lucern.**

From Setif, Constantine, Algeria. Received through Messrs. D. G. Fairchild and C. S. Scofield (No. 735a+), November 11, 1901.

Luzerne rustique.

7589. BAUHINIA sp. **White bauhinia.**

From Mount Silinda, Melsetter district, Rhodesia, South Africa. Received through Dr. Wm. L. Thompson, October 1, 1901.

"Is quite rare. The flowers are large and beautiful and very abundant, but very delicate. The plant seems quite sensitive to frost and many plants have been injured by it this year." (*Thompson.*)

7590. BAUHINIA sp. **Red bauhinia.**

From Mount Silinda, Melsetter district, Rhodesia, South Africa. Received through Dr. Wm. L. Thompson, October 1, 1901.

"The red variety is very widely and generally distributed over this region." (*Thompson.*)

7591 to 7630.

From London, England. Received through James H. Veitch & Sons, October 3, 1901.

A collection of ornamental plants as follows (nomenclature is that of the seedsmen):

7591. BEGONIA sp. **Begonia.**

Winter Cheer.

7592. BEGONIA sp. **Begonia.**

Adonis.

7593. BEGONIA CARMINATA. **Begonia.**

7594. BEGONIA sp. **Begonia.**

Ensign.

7595. BEGONIA EUDOXA. **Begonia.**

7596. BEGONIA INCOMPARABILIS. **Begonia.**

7597. BEGONIA sp. **Begonia.**

John Heal.

7598. BEGONIA sp. **Begonia.**

Mrs. Heal.

7599. BEGONIA sp. **Begonia.**

Venus.

7600. BEGONIA sp. **Begonia.**

Winter Perfection.

7601. CODIAEUM VARIEGATUM. **Croton.**

Mrs. McLeod.

7602. CODIAEUM VARIEGATUM. **Croton.**

Aigburth Gem.

7603. CODIAEUM VARIEGATUM. **Croton.**

Mrs. Iceton.

7591 to 7630—Continued.

7604. Codiaeum variegatum. **Croton.**

Princess of Wales.

7605. Dracaena sp.

Duchess of York.

7606. Dracaena sp.

Esckhantei.

7607. Dracaena sp.

The Sirdar.

7608. Dracaena sp.

Exquisite.

7609. Dracaena sp.

Donsetti.

7610. Amasonia calycina.

7611. Maranta major.

7612. Allamanda blanchetii.

7613. Medinilla bornensis.

7614. Medinilla magnifica.

7615. Mussaenda grandiflora.

7616. Roupala pohlii.

7617. Vriesia fenestralis.

7618. Tillandsia lindeniana.

7619. Guzmania musaica.

7620. Urceolina pendula.

7621. Zingiber officinale.

7622. Richardia elliottiana.

7623. Richardia pentlandi.

7624. Hedychium gardnerianum.

7625. Dianthus caryophyllus. **Carnation.**

Blush White.

7626. Dianthus caryophyllus. **Carnation.**

Lady Grimstone.

7627. Dianthus caryophyllus. **Carnation.**

Lord Rosebery.

7628. Dianthus caryophyllus. **Carnation.**

Trumpeter.

7629. Dianthus caryophyllus. **Carnation.**

George Maquat.

7630. Semele androgyna.

7631 to 7636. Phoenix dactylifera. **Date palm.**

From Egypt. Received through Mr. D. G. Fairchild (No. 597) from Mr. Em. C. Zervudachi, Alexandria, October 2, 1901.

7631.

Amri. "One of the best varieties, of large size; color, garnet verging on black." (*Zervudachi.*)

7632.

Oga of Bedrichen. "Of medium size; color, garnet verging on black." (*Zervudachi.*)

7633.

Nagl-el-Basha. "One of the best varieties, of large size; color, yellowish." (*Zervudachi.*)

7631 to 7636—Continued.

7634.

Sultani or *Soubaa-el-Sitti.* "One of the best varieties, of medium size; color, yellowish." (*Zervudachi.*)

7635.

Birket-el-Haggi. "Of medium size; color, garnet verging on black." (*Zervudachi.*)

7636.

Am-hat. "Of small size and yellowish color." (*Zervudachi.*)

7637. LATHYRUS TINGITANUS. **Tangier scarlet pea.**

From Algeria. Received through Mr. D. G. Fairchild, September 26, 1901.

7638. CICER ARIETINUM. **Chick-pea.**

From Rouïba, Algeria. Received through Mr. D. G. Fairchild, September 26, 1901.

7639. LATHYRUS SATIVUS.

From Rouïba, Algeria. Received through Mr. D. G. Fairchild, September 26, 1901.

7640 to 7645.

From Tunis, Tunis. Received through Mr. D. G. Fairchild (Nos. 697 to 702), October 4, 1901.

Samples of miscellaneous seeds presented by the School of Agriculture of Tunis.

7640. HORDEUM VULGARE. **Naked barley.**

Chair-en Nebbi. "Originated in Tunis, but grown in the trial gardens of the college for three years." (No. 697.) (*Fairchild.*)

7641. HORDEUM VULGARE. **Naked barley.**

"From Turkestan. Grown three years in Agricultural College garden, Tunis." (No. 698.) (*Fairchild.*)

7642. TRIGONELLA FOENUM-GRAECUM. **Fenugreek.**

"The grain is eaten by the Jewish women of Tunis in large quantities in order to increase their avoirdupois, it being the fashion to weigh as much as 200 pounds or more. Primarily, however, a forage and soiling crop." (No. 699.) (*Fairchild.*)

7643. ANDROPOGON HALAPENSIS.

Sorgho d'Alep. "This is an important grain crop of north Africa. It hybridizes easily with broom corn and causes the latter to deteriorate." (No. 700.) (*Fairchild.*)

7644. CARTHAMNUS TINCTORIUS. **Safflower.**

"Grown as an oil plant." (No. 701.) (*Fairchild.*)

7645. GUIZOTIA ABYSSINICA.

"An oil-producing plant used like sesame. It is grown similarly." (No. 702.) (*Fairchild.*)

7646. PENNISETUM SPICATUM. **Pearl millet.**

From Tunis, Tunis. Received through Mr. D. G. Fairchild (No. 696), October 4, 1901.

Millet de Chandelles. "Probably grown extensively in the south of the province of Tunis, about Gabez. Arabs use it for food, Europeans for forage. May be useful for breeding. From School of Agriculture, Tunis." (*Fairchild.*)

7647. GOSSYPIUM sp. **Cotton.**

From Tunis, Tunis. Received through Mr. D. G. Fairchild (No. 695), September 26, 1901.

Coton bruine de Mallaganza. "Single boll of a brown cotton from the collection of cottons at the School of Agriculture of Tunis. Its origin is quite unknown." (*Fairchild.*)

7648. LINUM USITATISSIMUM. **Flax.**

From Oran, Tunis. Received through Mr. D. G. Fairchild (No. 717), September 26, 1901.

"Said to resist drought very well." (*Fairchild.*)

7649. LINUM USITATISSIMUM. **Flax.**

From Tunis, Tunis. Received through Mr. D. G. Fairchild (No. 716), September 26, 1901.

"Also said to be drought resistant." (*Fairchild.*)

7650 to 7653. TRITICUM DURUM. **Wheat.**

From Tunis, Tunis. Presented by the School of Agriculture of Tunis through Mr. D. G. Fairchild (Nos. 703 to 706). Received September 26, 1901.

Samples of wheat from the collection in the School of Agriculture of Tunis. They bear the following native names, for whose spelling Mr. R. Gagey, instructor at the college, is responsible:

7650.

Sba er Roumi (*Sboa-el-Roumia*). (No. 706.)

7651.

Azizi. (No. 705.)

7652.

Médeah. (No. 704.)

7653.

Abd-el-Kader. (No. 703.)

7654. CAPSICUM ANNUUM. **Red pepper.**

From Tunis, Tunis. Received through Mr. D. G. Fairchild (No. 718), September 26, 1901.

"A large, very fine, long red pepper from market of Tunis." (*Fairchild.*)

7655. CICER ARIETINUM. **Chick-pea.**

From Tunis, Tunis. Received through Mr. D. G. Fairchild (No. 707, May 27, 1901), September 26, 1901.

"The native chick-pea of Tunis for comparative tests as to nodule-producing properties and resistance to drought. From the School of Agriculture in Tunis." (*Fairchild.*)

7656. LOTUS TETRAGONOLOBUS. **Square pea.**

From Tunis, Tunis. Received through Mr. D. G. Fairchild (No. 715, May 27, 1901), September 26, 1901.

"A new forage and seed legume being tried at the Tunis Agricultural College. Its root nodules are remarkable for their size and number, and its seed-bearing capacity is extraordinary." (*Fairchild.*)

7657. TRIFOLIUM ALEXANDRINUM. **Berseem.**

From Cairo, Egypt. Received through Mr. D. G. Fairchild (No. 642, May 9, 1901), October 10, 1901.

Saida. "This variety stands somewhat intermediate in character between *Muscowi* and *Fachl.* Its long-root system enables it to withstand dry weather very well, and it is considered in Egypt as a variety of dry-land Berseem. It yields two cuttings only, and is therefore sown in such regions as can be irrigated two or three times. It should be sown in autumn, on land with a limited power of irrigation, and will yield, on an average, about 6 tons of green fodder per acre at the first cutting and 4 or 5 at the second. It makes better hay than the *Muscowi*, but can not be considered of as great importance as that variety. The root system of this variety is longer than in either of the others." (*Fairchild.*)

7658. TRIFOLIUM ALEXANDRINUM. **Berseem.**

From Cairo, Egypt. Received through Mr. D. G. Fairchild (No. 643, May 9, 1901), October 10, 1901.

Fachl. "This variety differs materially from the *Muscowi* (No. 7659), being used on land which is irrigated by the basin system, that is, by being overflowed for forty days in the autumn. The seed is broadcasted at the rate of a bushel an acre on the mud, and no later irrigations are found necessary, as the plant gives only one cutting. This, however, yields 9 tons of green fodder per acre and makes a better hay than the *Muscowi*. In order to secure the seed of this variety it is the practice to sow the same broadcast with wheat or barley, and the seed is separated from the grain by thrashing, it being much smaller and lighter. This variety will be limited in its use to regions where only one irrigation can be given during the winter, or possibly may prove valuable as a spring forage crop." (*Fairchild.*)

7659. TRIFOLIUM ALEXANDRINUM. **Berseem.**

From Cairo, Egypt. Received through Mr. D. G. Fairchild (No. 644), October 10, 1901. Secured through the kindness of the secretary of the Khedivial Agricultural Society of Egypt, Mr. George P. Foaden.

Muscowi. "The great fodder and soiling crop of Egypt. An annual, leguminous, green fodder crop, considered indispensable by the Egyptians as a half-year rotation with cotton. Its fodder-producing value, effect upon the soil in storing up nitrogen, and cleansing effect are considered exceptional. It will be best suited to irrigated lands in warm climates, but might also be tested as a spring fodder crop in the northwestern coast States. In Egypt the seed is sown generally in October, after the soil has been thoroughly irrigated to prepare a moist bed for the seed. It is sown broadcast at the rate of not less than 40 pounds per acre. Even as high as 50 to 60 pounds are sown. This is due in part to the prevalence of weevils in the seed, which sometimes destroy the germinating power of a large percentage. The seed should be harrowed into the soil lightly, and when started the young plants should be given plenty of water. In Egypt the plants grow so rapidly that if sown toward the end of October a first cutting can be made after forty-five or fifty days, but if sown later, after the cooler weather has set in, it takes a much longer time for the plants to develop. Depending upon the amount of water and the temperature, the plants yield from four to five cuttings, yielding for the first and second cuttings about 8 tons of green forage per cutting and for the third and fourth cuttings somewhat less. In order to secure seed for next year's planting the plants should be left to stand after the fourth cutting, when they will go to seed. In Egypt the seed production is larger and heavier than in the case of clover. After each cutting a sufficiently long period should elapse before the plants are irrigated again, to allow the cut surfaces of the stems to dry out; otherwise the water will rot the plants. This fodder plant deserves a thorough test in the Colorado Desert region, beet-sugar regions of the Southwest, and as a soiling crop in the orchards of California." (*Fairchild.*)

7660. TRITICUM VULGARE. **Wheat.**

From Cairo, Egypt. Received through Mr. D. G. Fairchild (No. 638, May 9, 1901), October 10, 1901.

Bohi. "A soft wheat which is grown popularly about Cairo, and is considered one of the best soft wheats of Egypt. This sample comes from the grounds of the Khedivial Agricultural Society and was remarkably free from *Puccinia*, although the American wheat varieties, *Henderson's Pedigreed* and *Gold Corn*, growing adjacent, were very badly rusted. This *Bohi* is an early ripening sort, at least one month earlier than above-mentioned American wheats. It is improbable that this variety will withstand a very low temperature, and it ought to do best in irrigated regions of the Southwest. It is planted about the 20th of November in Egypt and is cut the first week in May, although, from an American standpoint, it would be ripe by the last week in April. All wheat is left until dead ripe before cutting in Egypt. The temperature during the winter seldom goes below 40° F." (*Fairchild.*)

7661. Sesamum indicum. **Sesame.**

From Cairo, Egypt. Received through Mr. D. G. Fairchild (No. 635, May 9, 1901), October 10, 1901.

White. "This forms an important, profitable crop on the basin irrigated lands. It should be tried as late as the beginning of July after floods of Colorado River have subsided and might mature by the end of October. The seed should be broadcasted on the mud at a rate of about a bushel per acre. If possible, two subsequent waterings should be made, one when a few inches high and another later. If mud is not fresh it would be best to plow the land and harrow in the seed. (See No. 3972, Inventory No. 8, for description of oil making.) Lord Cromer, in his last report, mentions that sesame is exported from Egypt to Europe. It is largely used for making the Turkish sweetmeat *Chacla*(?). Profits in Egypt are estimated at about $40 an acre. For use in the Colorado River experiments. Secured through the kindness of Mr. George P. Foaden, secretary of the Khedivial Agricultural Society." (*Fairchild.*)

7662. Sesamum indicum. **Sesame.**

From Cairo, Egypt. Received through Mr. D. G. Fairchild (No. 636, May 9, 1901), October 10, 1901.

Brown. "I can not find that this has any advantage over the white, or vice versa, but it may prove better adapted to growth in the Colorado River flood plain. Secured through the kindness of Mr. George P. Foaden, secretary of the Khedivial Agricultural Society." (*Fairchild.*)

7663 to 7677.

From Asia Minor. Received through Mr. George C. Roeding, October 11, 1901.

A collection of economic plants secured in September, 1901, as follows:

7663. Ficus carica. **Caprifig.**

From Aidin. Designated "F."

7664. Ficus carica. **Caprifig.**

From Aidin. "*D.*" "A very large caprifig (same as No. 6832), from the garden of S. G. Magnisalis." (*Roeding.*)

7665. Ficus carica. **Caprifig.**

From Aidin. "*E.*" "One of the largest caprifigs from the garden of S. G. Magnisalis. (Same as No. 6836.)" (*Roeding.*)

7666. Ficus carica. **Caprifig.**

From Aidin. "*I.*" "A variety from the garden of S. G. Magnisalis, near the ruined mosque. This is not the variety especially mentioned by Mr. W. T. Swingle." (*Roeding.*)

7667. Ficus carica. **Caprifig.**

From Aidin. "*G.*" Very largest and finest caprifig from the garden of S. G. Magnisalis. Same as No. 6835." (*Roeding.*)

7668. Pistacia vera. **Pistache.**

From Smyrna. "From the Greek nurseryman near Smyrna." (*Roeding.*)

7669. Pyrus sp. **Pear.**

From Smyrna. "Wild pear growing near Smyrna, a good stock, valuable for clay ground." (*Roeding.*)

7670. Amygdalus persica. **Peach.**

From Smyrna. "A yellow cling, yellow to the pit, ripening in August. From Pounar Bashi." (*Roeding.*)

7663 to 7677—Continued.

7671. VITIS VINIFERA. **Grape.**

From Smyrna. "A superior variety of Malaga called *Rezaki*. Probably *Datte de Beyrouth*." (*Roeding.*)

7672. PRUNUS ARMENIACA. **Apricot.**

From Smyrna. "From Pounar Bashi near Smyrna. An apricot with a sweet kernel like an almond." (*Roeding.*)

7673. PISTACIA TEREBINTHUS. **Terebinth.**

From Smyrna. *Karabanour.* "Buds from male pistachio terebinth." (*Roeding.*)

7674. PUNICA GRANATUM. **Pomegranate.**

From Smyrna. *Tcherkerdeksis.* "The seedless pomegranate from Pounar Bashi." (*Roeding.*)

7675. OLEA EUROPAEA. **Olive.**

From Smyrna. "Pickling and oil olive from Greek nurseryman near Smyrna." (*Roeding.*)

7676. PUNICA GRANATUM. **Pomegranate.**

From Smyrna. *Feysinar.* "Pomegranate from Pounar Bashi." (*Roeding.*)

7677. PUNICA GRANATUM. **Pomegranate.**

From Smyrna. *Kadinar.* "Pomegranate from Pounar Bashi." (*Roeding.*)

7678. COFFEA ARABICA. **Coffee.**

From Macassar, Celebes. Received through Messrs. Lathrop and Fairchild (No. 386a, February 11, 1900), October 15, 1901. Sent by Hon. K. Auer, United States consul.

Menado. "The bean of this famous coffee is very large. It is one of the highest priced coffees on the market. Sells dry in Amsterdam at 70 to 80 cents Dutch per one-half kilo. Best 'Java Brown' brings no more." (*Fairchild.*)

7679. VICIA HIRTA.

From Tessala, Algeria. Obtained by Mr. C. S. Scofield, April, 1901. Received October 21, 1901.

"Dried roots and tubercles from barley field at Tessala." (*Scofield.*)

7680. LATHYRUS SATIVUS.

From Oran, Algeria. Obtained by Mr. C. S. Scofield, April, 1901. Received October 21, 1901.

"Dried roots and tubercles of the 'Pois Carré' from salt-impregnated field near Oran. Much cultivated." (*Scofield.*)

7681. LUPINUS LUTEUS. **Yellow lupine.**

From Rouïba, Algeria. Obtained by Mr. C. S. Scofield, April 10, 1901, through Dr. L. Trabut. Received October 21, 1901.

"Dried roots and tubercles. Tubercle growth considered by Doctor Trabut as pathological and characteristic of *Lupinus luteus*." (*Scofield.*)

7682. TRIFOLIUM ANGUSTIFOLIUM.

From Kabylia, Algeria. Obtained by Mr. C. S. Scofield, April, 1901. Received October 21, 1901.

"Roots and tubercles." (*Scofield.*)

7683. TRIFOLIUM PANORMITANUM.

From Rouïba, Algeria. Obtained by Mr. C. S. Scofield, April 10, 1901. Received October 21, 1901.

"Roots and tubercles." (*Scofield.*)

7684. AMYGDALUS COMMUNIS. **Almond.**

From Malaga, Spain. Received through Mr. D. G. Fairchild (No. 768, July 31, 1901), October 21, 1901.

"Supposed to be grafted plants of the famous Jordan almond. Upon arrival they proved to be only ungrafted seedlings, and not at all as per the contract made with the Spanish gardener." (*Fairchild.*)

7685. TRITICUM VULGARE. **Wheat.**

From Volo, Greece. Received through Mr. D. G. Fairchild (No. 581, March 23, 1901), September 28, 1901.

Diminum. "A variety of spring wheat called *Diminum*, meaning 'two months.' This is a semihard wheat used in Greece to plant after the failure of the winter wheat. It is not a two-month wheat, as its name implies, but matures in about three months, being planted the last of February and harvested the first of June. It is a light bearer, not very highly esteemed in Greece except for a catch crop, as it were, when winter wheat has failed. Sent by kindness of Mr. Ar. Tsakonas, of Athens, who can secure a large quantity in June, if desired." (*Fairchild.*)

7686. NICOTIANA TABACUM. **Tobacco.**

From Godwinsville, Ga. Received through Mr. H. J. Webber, October 28, 1901.

Asmyr. A Turkish cigarette tobacco. About 6 ounces of seed obtained by Mr. Webber through Mr. Robert Viewig, who imported the original seed from Turkey and grew it at Godwinsville, Ga. A crop was grown in 1899, from which the present seed was taken. Production usually very light, but product of superior quality.

7687. VITIS sp. **Grape.**

From southern Mexico. Received through Dr. J. N. Rose (No. 5349), October 28, 1901.

"A new grape, collected in southern Mexico this past season. It is a very remarkable species in that it dies down to the ground each year, apparently arising from the big deep-set tuber or tuberous root. It produces an immense growth of vines, the internodes often being 1½ to 2 feet long. The fruit is borne in large clusters, sometimes nearly a foot long, individual grapes being about the size of the fox grape." (*Rose.*)

7688. HEERIA JALAPA.

From southern Mexico. Received through Dr. J. N. Rose (No. 6081), October 28, 1901.

"A very beautiful little trailing plant, well suited for baskets or for a carpet plant. It belongs to a genus of plants much cultivated." (*Rose.*)

7689 to 7765.

From Algeria. Secured by Mr. C. S. Scofield, April to June, 1901. Received at the Department in October, 1901. Turned over to the Office of Seed and Plant Introduction and Distribution, March 6, 1903.

"The following collection of leguminous plants was obtained by Mr. C. S. Scofield, in many cases through the kindness of Dr. L. Trabut, government botanist of Algeria. This collection represents the results of many years careful study by Doctor Trabut, who, with Doctor Battangier, published a flora of Algeria, in which some of these species were described for the first time. Doctor Trabut familiarized himself with the indigenous flora of Algeria by many expeditions to all parts of the colony, and some of the most promising species for culture were found to be very rare in a wild state, having been almost exterminated by herbivorous animals. The collection here enumerated was obtained for study and not for distribution. It is of the very greatest value and the various species are now being cultivated in a preliminary way by the Department of Agriculture to get information as to their adaptability to American conditions. As the life histories of the various species are worked out so that reasonable prognosis can be made as to the value of the plant for forage or for hay or green manure and some information can be given as to the regions where it is most likely to succeed, and where seed can be grown at a reasonable cost, then this species will be introduced into practical culture. It is likely that many plants of the greatest value for the future development of American agriculture, especially in the dry regions of the West, are included in this collection, which is the cream of what has been brought together by twenty years' study in North Africa, one of the richest regions of the world for leguminous plants suitable for field culture." (*Swingle.*)

7689. LUPINUS TERMIS. **White lupine.**

"This plant is one of the prominent lupines which has a place in general culture. It has a vigorous, upright growth." (*Scofield.*)

7690. LUPINUS ANGUSTIFOLIUS.

"Specimen found near Fort National, where the soils are evidently of marble or limestone origin." (*Scofield.*)

7691. ONONIS AVELLANA.

"This plant is too coarse for use as a forage plant; it may have a place as a soil fixer or for green manuring." (*Scofield.*)

7692. MELILOTUS MACROSTACHYS.

"Specimen obtained from trial plats at the botanical station at Rouïba. This is one of the most promising plants of this genus. It is the only one not objectionable for forage purposes on account of its odor. It has a vigorous growth, often reaching 3⅓ feet in height, and has a large leafy surface." (*Scofield.*)

7693. MELILOTUS SPECIOSA.

"Specimen from botanical garden at Rouïba. Several varieties of this species are under cultivation. It is a fairly good forage plant, being erect and producing an abundance of foliage." (*Scofield.*)

7694. MELILOTUS SULCATA.

"Specimen from the garden of the school of medicine of Algiers. This plant is one of the least valuable of this genus. It has rather harsh stems and does not have an abundant leaf growth. It seeds very freely." (*Scofield.*)

7695. MEDICAGO ARBOREA.

7696. CYTISUS PROLIFERUS.

"Specimen from botanical station at Rouïba. This plant has been introduced into Algeria from the Canary Islands. It is a shrub, often 12 to 14 feet high; very leafy and producing a large number of seed pods. The new shoots are often trimmed from the tree and used in the dryer countries." (*Scofield.*)

7697. CYTISUS LINIFOLIUS.

7698. SCORPIURUS VERMICULATA.

"Specimen from botanical station at Rouïba, where it is both wild and cultivated. Plant has creeping habit, rather vigorous, but seldom more than 7 or 8 inches high; fruits very freely. There are large numbers of nodules. The plant is principally for sheep pasturing and for enriching the soil in nitrogen." (*Scofield.*)

7689 to 7765—Continued.

7699. Trifolium panormitanum.

"Specimen found growing wild near botanical station at Rouïba. This plant closely resembles *T. alexandrinum* in general appearance and habit of growth. The lower tooth of the calyx is very much longer than the other four teeth, making identification simple. This plant is little or not at all cultivated as yet in Algeria, but was found to have gained possession of some wild hay fields near Tizi Ouzou. It is very vigorous and upright in habit of growth, often over 2 feet in height." (*Scofield.*)

7700. Lotus tetragonolobus. **Square pea.**

"Specimen found growing wild near botanical station at Rouïba. Plant has a reclining or creeping habit, seldom growing more than 10 or 12 inches in height; it is very vigorous, leaves of a very bright green color, flowers brilliant, rosy red. It fruits freely and bears large numbers of root nodules; has been introduced into America in an experimental way through the Department of Agriculture. It deserves further attention." (*Scofield.*)

7701. Vicia hirta.

"Specimen obtained from botanical station at Rouïba, where the plant grows wild. It has been tried in culture there, but has not done well enough to hold a place in competition with other species of the same genus. The stem is upright, but rather weak, sometimes reaching 2 feet in height." (*Scofield.*)

7702. Vicia faba.

7703. Vicia fulgens.

"From small plat growing at botanical station at Rouïba. This species is one of the very important ones introduced by Dr. Trabut into culture in Algeria. It seeds very freely and produces a large amount of foliage." (*Scofield.*)

7704. Vicia narbonnensis.

"Specimen from botanical station at Rouïba, where it is both wild and cultivated. This plant is erect, very succulent, and robust. It is often sown with winter oats to be cut for green forage. It seeds freely and matures early in May. A close relative of this plant, possibly a variety of the species, is often confused with it, the other variety being entirely glabrous, while the type is decidedly hispid." (*Scofield.*)

7705. Vicia bengalensis.

(This seed was never turned over to the Office of Seed and Plant Introduction and Distribution, as it was all used in experiments by the Office of Vegetable Pathological and Physiological Investigations.) (See No. 5576.)

7706. Vicia calcarata.

"Specimen found near botanical station at Rouïba, probably not from cultivated plats. This plant is commonly found along the Algerian coast, growing in hay fields and waste places. So far as known it is not at all cultivated." (*Scofield.*)

7707. Vicia sativa.

Vicia sativa de Toulouse.

7708. Vicia sativa.

Blanche.

7709. Vicia sativa.

Vicia sativa de Tunis.

7710. Hedysarum coronarium.

"Specimen found growing in the garden of the School of Medicine of Algiers. Source of seed not known. Plant very robust; stems rather weak." (*Scofield.*)

7689 to 7765—Continued.

7711. HEDYSARUM PALLIDUM.

"Specimen obtained from near Oran by Mr. D G. Fairchild. It was nearly matured. The plant is mentioned by Battandier as being perennial, having large, ornamental flowers which are white and streaked with purple; the stem fleshy, decumbent; the leaves somewhat pubescent, not as long as the flower clusters; the leaflets 10 to 20 mm. by 5 to 10; flowers in oblong flower clusters; the pod spiny, 4 to 7 articulations with vertical spines at the ends; common in salty and gypsum soils." (*Scofield.*)

7712. HEDYSARUM MAURITANICUM.

"Specimen from garden of the School of Medicine of Algiers; seed probably brought by Doctor Trabut from somewhere in the province of Oran. The plant is somewhat less vigorous than *H. coronarium;* stems reclining; plant often more than 2 feet in height." (*Scofield.*)

7713. TRIGONELLA FOENUM-GRAECUM. **Fenugreek.**

"Specimen from the garden of the School of Medicine of Algiers. This plant has an upright habit of growth, reaching 18 to 20 inches in height; has a very important place in general culture as a soil enricher and a green forage crop. It is often planted in the autumn between rows of grapevine and turned under the following spring, when the cultivation of the grapes begins. When used as a green forage crop, or when the seed is used, the fat producing effect is very noticeable. The plant has a very strong odor when dried, and animals fed on the dry grain or green forage are strongly affected by the odor. Eggs from hens fed on this plant are uneatable. Meat of animals having access to it can not be used as human food; as a horse food it is of considerable importance. The Jewish women eat a meal prepared from the grain of this plant and become enormously fat. It is already used to some extent in Virginia, and very widely cultivated throughout Persia and India. About 1,000 tons of this seed are sold annually by one dealer, Schempft & Co., in the Liverpool Stock Exchange. This seed forms an essential quality of nearly all prepared stock foods. The root bears a large number of nodules." (*Scofield.*)

7714. TRIGONELLA CORNICULATA.

7715. FESTUCA FANARA.

7716. VICIA LUTEA.

7717. VICIA SICULA.

"Specimen found growing wild near the botanical station at Algiers. So far as known, the plant is not cultivated, but is found very commonly along the Algerian coast. The stems are rather small. It is of no present value as a forage plant." (*Scofield.*)

7718. VICIA EGYPTIANA.
(Not in Kew Index.)

7719. ASTRAGALUS BOETICUS.

"Specimen found growing wild in the garden of the School of Medicine of Algiers. So far as known, this plant has not been introduced into culture. The stem is upright, though inclined to be weak, 20 to 24 inches high; rather straggling in habit of growth; plant deserves attention for improvement." (*Scofield.*)

7720. ANTHYLLIS TETRAPHYLLA.

"Specimen found in the woods above Mustapha. This plant is said to be adapted for use in arid regions. It has a creeping habit of growth, fruits very freely, and produces a large number of root nodules." (*Scofield.*)

7721. ANTHYLLIS VULNERARIA.

"Specimen found in the woods above Mustapha. This plant is not common in Algeria. It has a decidedly different habit of growth from that of *A. tetraphylla.* It grows very commonly along the bluffs above Hussien Dey." (*Scofield.*)

7689 to 7765—Continued.

7722. CERATONIA SILIQUA. **Carob.**

"Seeds of an improved variety from Blidah." (*Scofield.*)

7723. BRASSICA OLERACEA. **Cabbage.**

"A few seeds of a wild cabbage from Rouïba." (*Scofield.*)

7724. AEGILOPS OVATA.

From Bouli Bree (?)

7725. HEDYSARUM PALLIDUM.

From Oran.

7726. HIPPOCREPIS MULTISILIQUOSA.

"Specimen from the garden of the School of Medicine of Algiers. So far as known, this plant is not of great importance as a forage plant. It rarely reaches 20 inches in height, and has a straggling habit of growth. The stem is hard and produces few leaves." (*Scofield.*)

7727. HYMENOCARPUS CIRCINATA.

"This plant is described by Battandier as being velvety pubescent; stems about 1 foot in height, erect or blanched; lower leaves entire, obtuse, attenuated at the petiole, 4 to 6 cm. by 2; leaf pinnately divided with an odd leaf at the end; flowers 2 to 4 in a peduncle, umbel exceeding the leaf; pod velvety, flattened, orbiculate, sometimes spiny at the back, sometimes not, 15 mm. in diameter. This plant is extremely rare and difficult to find, but Doctor Trabut is of the opinion that it is of very great value as a forage plant, although it is not yet evident that he has experimental proof to support the belief. Secured by Mr. Fairchild from wild plants growing not far from Oran through assistance of Prof. M. Doumergue, of Oran." (*Scofield.*)

7728. LATHYRUS TINGITANUS.

"This grows from year to year in the garden of the School of Medicine of Algiers, producing a large number of flowers which are nearly or quite all fertile." (*Scofield.*)

7729. LATHYRUS NUMIDICUS.

"Specimen found growing in the garden of the School of Medicine of Algiers. The original seed was found by Doctor Trabut on the rocks near El Kantara. The plant has a creeping habit of growth; matures very early and produces a large number of well filled pods; grain rather small, round, dark gray." (*Scofield.*)

7730. LOTUS ORNITHOPODIOIDES.

"Specimen from the garden of the School of Medicine of Algiers. This plant is common in waste places near Algiers; has not very robust stems; some reclining; grows in rather poor soil; may reach a height of 15 inches. The roots bear numerous peculiarly globose nodules. The plant bears seed very freely." (*Scofield.*)

7731. LOTUS EDULIS.

"Specimen from garden of the School of Medicine of Algiers. This plant has a creeping habit of growth, and produces many pods which are fleshy, with comparatively small seeds, and the pods when green are sweet to the taste. Doctor Trabut thinks that this plant can be improved to be used as a vegetable." (*Scofield.*)

7732. LUPINUS LUTEUS.

7733. LUPINUS sp.

"A violet lupine of Spanish origin." (*Scofield.*)

7734. MEDICAGO DENTICULATA var. APICULATA.

7689 to 7765—Continued.

7735. MEDICAGO ECHINUS.

"Specimen found near Oued Smaar, Algeria. This plant is one of the important annual medicagos. It has an inclining or creeping habit of growth; is very vigorous, and produces a large number of fruits." (*Scofield.*)

7736. MEDICAGO HELIX var. RIGIDULA.

7737. MEDICAGO DENTICULATA.

7738. MEDICAGO ORBICULARIS.

7739. MEDICAGO TRUNCATULA.

7740. MEDICAGO TURBINATA.

"Specimen found in woods above Mustapha. This plant has an inclining, or sometimes upright, habit of growth. It is an annual, and deserves a trial." (*Scofield.*)

7741. MEDICAGO TRUNCATULA.

7742. MEDICAGO CILIARIS.

7743. MEDICAGO SECUNDIFLORA.

"Obtained on Ain el Hadjar Plateau." (*Scofield.*)

7744. MELILOTUS MACROCARPA.

"Specimen found near Hotel Continental, Mustapha. It is not particularly common. The plant is mentioned by Battandier as being upright, profusely branched, with bright green leaflets, very large, obovate, glaucous underneath; flowers about 6 mm. long, pale yellow, in loose bunches, exceeding the leaves. The fruit is almost as large as a small pea, ovoid, obtuse, or spherical; seeds, one or two, large, tuberculate. It is said that Arabs sometimes use these fruits as a spice, since they have the odor of the melilot in a very high degree." (*Scofield.*)

7745. ONONIS sp.

7746. ONOBRYCHIS sp.

7747. ONONIS AVELLANA.

7748. ERIOBOTRYA JAPONICA. **Loquat.**

(Seed never turned over to the office of Seed and Plant Introduction and Distribution.)

7749. GENISTA SPHAEROCARPA.

7750. SCORPIURUS VERMICULATA.

7751. SCORPIURUS SULCATA.

"Specimen found near Hotel Continental, Mustapha. This plant seems to be at present of very little value. Like *S. vermiculata* it never attains any considerable height, and is, if anything, less vigorous than *S. vermiculata*. It thrives, however, in very poor soil, and is a harmless weed." (*Scofield.*)

7752. TRIGONELLA GLADIATA.

"Nearly related to *T. foenum-graecum*." (*Scofield.*)

7753. TRIFOLIUM ANGUSTIFOLIUM.

"Specimen from grounds of Danish consulate, Mustapha. This plant is closely allied to *T. incarnatum*. It does not thrive well in Algeria, seldom reaching more than 1 foot in height, and producing few, if any, branches. Some very vigorous specimens were seen near Oran and west of there, where it is more common than near Algiers. It is an annual, maturing early in May." (*Scofield.*)

7689 to 7765—Continued.

7754. Trifolium lappaceum.

"Specimen from the grounds of the Danish consulate, Mustapha. This plant is one of the less vigorous of the genus. It has a somewhat reclining habit of growth; stems seldom more than 12 to 15 inches long, rather soft and delicate. This plant is common in waste places in the vicinity of Algiers." (*Scofield.*)

7755. Trifolium glomeratum.

"Specimen found near Oued Smaar, Algeria. This plant has a creeping, or at least an inclining habit of growth; is found on roadsides or in waste places; is as yet of no particular importance as a forage plant." (*Scofield.*)

7756. Trifolium pallidum.

"Specimen from the garden of the School of Medicine of Algiers. This plant is common in the fields and waste places along the coast near Algiers; it resembles *T. pratense* somewhat in habit of growth, though it inclines to be smaller and less vigorous." (*Scofield.*)

7757. Trifolium panormitanum.

7758. Trifolium repens.

"Specimen from nursery of Mr. Labatut, of Tizi Ouzou. It grows to a height of 8 to 10 inches from its creeping stem; produces seed freely; leaves and stems bright green; very succulent." (*Scofield.*)

7759. Trifolium spumosum.

"Specimen found growing wild near botanical station at Rouïba. The plant is an annual, vigorous and succulent, with rather weak stems, sometimes reaching a height of 20 to 24 inches under favorable conditions, i. e., in soils of limestone origin; the root nodule development is very pronounced. So far as known this plant is not yet cultivated, but it has the appearance of being of great value should it be introduced and somewhat improved by selection. It seeds very freely, producing grains somewhat larger than *T. pratense*." (*Scofield.*)

7760. Trifolium stellatum.

"Specimen from near botanical station at Rouïba. This plant is very common along the roadsides and in the waste places of Algiers. It is not of great importance as a forage plant. It seldom reaches a height of more than ten inches, and the stem branches very little." (*Scofield.*)

7761. Trifolium tomentosum.

7762. Vicia sativa.

"Large seeded variety." (*Scofield.*)

7762a. Vicia sativa.

"A small seeded variety." (*Scofield.*)

7763. Vicia sativa.

"Specimen from the garden of the School of Medicine of Algiers. There are very many varieties of this species growing wild in Algiers." (*Scofield.*)

7764. Vicia hirta.

From Tessala, Algeria.

7765. Vicia sativa, var. macrocarpa.

"Specimen found in grounds of Danish consulate, Mustapha Superieure. This is doubtless the variety known as 'Macrocarpa,' but very little is definitely known about the varieties of *Vicia sativa*. They grow in very large numbers, and attempts to classify them have up to the present time been fruitless." (*Scofield.*)

7766 to 7768.

(Numbers not utilized.)

7769. FRAGARIA spp. **Strawberry.**

From Mexico. Received through Dr. J. N. Rose, October 30, 1901.

Seeds of cultivated varieties for plant-breeding purposes.

7770. SABAL EATONIA.

From Miami, Fla. Received through Mr. H. C. Henricksen, October 26, 1901. Collected by Mr. P. H. Rolfs.

7771. THRINAX FLORIDANA.

From Miami, Fla. Received through Mr. H. C. Henricksen, October 26, 1901.

7772. SERENOA SERRULATA.

From Miami, Fla. Received through Mr. H. C. Henricksen, October 26, 1901.

7773. INODES PALMETTO.

From Miami, Fla. Received through Mr. H. C. Henricksen, October 26, 1901.

7774. COCCOTHRINAX GARBERI.

From Miami, Fla. Received through Mr. H. C. Henricksen, October 26, 1901.

7775. COFFEA ARABICA. **Coffee.**

From Macassar, Celebes. Received through Messrs. Lathrop and Fairchild (No. 386a, February 11, 1900), October 30, 1901. Sent by K. Auer, United States Consular Agent.

Menado. (See No. 7678.)

7776. PUNICA GRANATUM. **Pomegranate.**

From Oran, Algeria. Received through Messrs. D. G. Fairchild and C. S. Scofield (No. 738, June 14, 1901), October 30, 1901.

"Grafting wood of several varieties of pomegranates of Algerian origin from the *Orphelinat de Misserghin*, near Oran." (*Fairchild.*)

7777. CERATONIA SILIQUA. **Carob.**

From Oran, province of Oran, Algeria. Received through Messrs. D. G. Fairchild and C. S. Scofield (No. 737, June 14, 1901), October 30, 1901.

"Large fruited variety of carob, introduced into Algeria from Spain. Said to be monœcious, not requiring the presence of male trees to make it fruitful. Pods are large, thick, and of reported superior excellence." (*Fairchild.*)

7778 to 7780. AMYGDALUS COMMUNIS. **Almond.**

From Alicante, Spain. Received October 30, 1901.

7778.

Marcona. Nuts of this Spanish variety of almond.

7779.

Pastaneta. Nuts of this Spanish variety of almond.

7780.

Costereta. Nuts of this Spanish variety of almond.

7781. Capsicum annuum. **Red pepper.**

From Los Angeles, Cal. Received October 26, 1901, from Mr. Elmer Stearns.

"From seed in mixed spices from Japan." (*Stearns.*)

7782. Capsicum annuum. **Red pepper.**

From Los Angeles, Cal. Received October 26, 1901, through Mr. Elmer Stearns.

"Originally from Juarez, Mexico. Forms a bush nearly 4 feet high, with peppers erect instead of hanging." (*Stearns.*)

7783. Capsicum annuum. **Red pepper.**

From Los Angeles, Cal. Received October 26, 1901, through Mr. Elmer Stearns.

"Originally from Juarez, Mexico." (*Stearns.*)

7784. Hedysarum coronarium. **Sulla.**

From Malta. Received through Mr. D. G. Fairchild (No. 688, May 22, 1901), July 23, 1901.

Gozzo. "An early ripening variety of sulla from the little island of Gozzo, near Malta. This is said to be superior to the kind grown on Malta in seasons when spring rains are scanty, as it matures properly, while the Malta variety fails to ripen well. In seasons of abundant spring rainfall it is not economical, because it matures too soon. The seed in the seed pod is used in Malta, and it was not possible to get cleaned or decorticated seed. According to the literature, sulla should be planted in deep soil. This variety forms the principal fodder and soiling crop of an island where soil is not much over 6 to 8 inches deep on a bed of calcareous rock. It is sown here in July and August on the wheat or barley stubble and allowed to 'scorch' in the burning sun until the September or October rains begin to mature it, as they say. (The use of a seed scratcher might make quick germination possible and probably largely increase the stand.) It is cut here only when in full bloom, for, if left to stand, the leaves fall. The yield per acre is unusual. Some growers report 40 to 90 tons of green fodder, but no definite information on this point was obtained. It is the great green cover crop of Malta, and a rotation of wheat or oats and sulla is very common here. Everywhere the fields are filled with big stacks of the bundles of this plant. In some countries the seed is immersed for five minutes in hot water to hasten germination. The fleshy roots are often dug by peasants and fed to the hogs or horses. They are full of starch and sugar. The root tubercles are rather small and delicate, but very numerous. Attempts to cultivate the specific germ of these tubercles are being made from dried roots sent to Dr. George T. Moore from Malta." (*Fairchild.*)

7785. Triticum durum. **Wheat.**

From Vesoul-Benian, Algeria. Received through Messrs. D. G. Fairchild and C. S. Scofield (No. 723, June 20, 1901), November 6, 1901.

Pelissier. "This wheat, which is one of the best varieties of macaroni wheats grown in Algeria, is said to have been originated by selection from native Algerian durum wheats by a Mr. Pelissier, at Pont de l'Isser, a small town in western Oran. From there it was introduced into the western part of the province of Algiers. Mr. Paul Chalvin, of Vesoul-Benian, received a small quantity of seed from Doctor Trabut, botanist of the Government of Algeria, and by a rough en masse selection he has kept it almost pure. The variety under the name *Pelissier* is better known in the province of Algiers than in that of Oran, where it is said to have originated; in fact, we found no one growing it, even in Mr. Pelissier's neighborhood. Mr. Chalvin, from whom this seed was bought, sells his whole crop for seed purposes, and has practiced for four years a selection of the best ears. These are collected by his Arab foreman and thrashed by hand. About 200 kilos of this selected grain are sown, and the process is repeated every year. Last year this selection was not done. This wheat sent is about four generations from such selection. Mr. Chalvin believes the field from which it was taken will produce about 45 bushels per acre. At the Paris Exposition Mr. Chalvin took a gold medal on a sheaf of this wheat. Owing to its hardiness, vigorous growth, and large yield, this wheat is gradually replacing all other sorts in the vicinity of Vesoul-Benian, and at Doctor Trabut's botanical experiment station at Rouïba, Algiers, it has ranked among the best in yielding capacity and resistance to rust. The climate of Vesoul-Benian (altitude 700 meters) is a warm one, +25° and +23° F. being the usual minimums in winter. The snows, sometimes a foot or more deep, are of very short duration. The mean yield of this variety was about 16 to 22 bushels per acre on stiff clay soil without hardpan. It is on this stiff soil that the variety seems to do best. The resistance to drought shown by this sort is evidenced by the fact that it has proved a success in the Chelif Valley, where as early as the beginning of June the thermometer rises to 107° F., and droughts of long duration are said to occur in the spring. In Algeria the wheat is planted in November and harvested in June, but it is worth while testing it in America as a spring wheat in the northern States. The only noticeable weeds in the fields from which this seed was bought were wild anise, a wild oat (*Avena sterilis*), and a large flowered carrot, none being of a serious character except the wild anise, which ripens about the same time with the wheat. It is, however, a light seeded plant, and its seeds are easily blown out by the fanning mill." (*Fairchild and Scofield.*)

7786. TRITICUM VULGARE. **Wheat.**

From Kharkof, Russia. Received November 9, 1901, through Dr. A. Boenicke, president of the Kharkof Agricultural Society.

Kharkof. (Same as No. 7467.)

7787. TRITICUM VULGARE. **Wheat.**

From Rostov-on-Don, Russia. Received through Hon. W. R. Martin, acting United States consular agent, November 9, 1901.

Beloglina. A variety of hard winter wheat from Byelaya Glinskaya station, Don Territory. (See Nos. 6012 and 6013.)

7788. HEDYSARUM CORONARIUM ALBIDUM. **Sulla.**

From Setif, Province of Constantine, Algeria. Received through Messrs. D. G. Fairchild and C. S. Scofield (No. 735c), November 11, 1901.

"This variety, which differs from the type of the species by having white flowers, is found by Mr. Ryf (see No. 7586) to be much longer lived and in general preferable to the ordinary *H. coronarium* of the region. The seeds, however, are very slow in germinating and should be put through some sort of a seed-scratching device before planting." (*Fairchild and Scofield.*)

7789. HEDYSARUM NAUDINIANUM.

From Setif, Province of Constantine, Algeria. Received through Messrs. D. G. Fairchild and C. S. Scofield (No. 735b), November 11, 1901.

"This is a very hardy, narrow leaved, bushy variety, indigenous to the vicinity of Setif. It has been recently introduced into cultivation by Mr. Ryf (see No. 7586), who is trying it under the same cultural methods that he uses with his new strain of alfalfa. His experiments are not yet completed, but he has reasons to hope that this species will prove of value, especially for dry and rather poor soils." (*Fairchild and Scofield.*)

7790. HEDYSARUM CORONARIUM. **Sulla.**

From Setif, Province of Constantine, Algeria. Received through Messrs. D. G. Fairchild and C. S. Scofield, November 11, 1901.

Red Flowered. "This is the ordinary type which is widely grown as a forage or soiling crop in Algeria. It is perennial and yields abundant crops under favorable conditions. It is widely used in all countries bordering on the western Mediterranean. As a hay crop, its greatest weakness is that its leaves fall easily when they become dry." (*Fairchild and Scofield.*)

7791. MELILOTUS sp. **Melilot.**

From China. Received from Dr. C. Sprenger, Vomero, near Naples, Italy, November 1, 1901.

7792. TRITICUM DURUM. **Wheat.**

From Setif, Constantine Province, Algeria. Received through Messrs. D. G. Fairchild and C. S. Scofield (No. 724, June 20, 1901), November 6, 1901.

Mahmoudi. "This is quite similar to a well-known Algerian variety called 'Nab-el-bel.' It is one of the most highly valued wheats for the macaroni trade which Setif furnishes. The latter locality is probably the largest primary market for macaroni wheats in Algeria. The seed obtained is from that grown by the Arabs in the vicinity of Setif and the purity of type can not be guaranteed. This quantity is secured through the kindness of Mr. G. Ryf, manager for the *Société Genevoise de Sétif.* In the country of its origin, this wheat is sown in November or December and ripens late in June or early in July. It may be worth while trying it, however, in the spring-wheat regions of America, where it would be classed as one of the so-called 'goose' wheats." (*Fairchild and Scofield.*)

7793. TRITICUM DURUM. **Wheat.**

From Setif, Constantine Province, Algeria. Received through Messrs. D. G. Fairchild and C. S. Scofield (No. 725, June 20, 1901), November 6, 1901.

Mohamed ben Bachir. "This variety of wheat is one of the prominent sorts grown by both Arabs and French farmers on the high plateau of the Province of Constantine. It is one of the sorts highly prized by manufacturers of macaroni, although its name has not won for itself a reputation in the trade. It is one of the several valuable sorts commonly cultivated in this justly celebrated wheat region. The saying is that this wheat was originally brought from Mecca by the pilgrim whose name it bears. In botanical characters it is much like the *Pelissier* variety (No. 7785), and it is possible that the *Pelissier* was obtained from this stock. This seed was purchased of Mr. G. Ryf, of Setif, manager of the Geneva Company, and one of the best cultivators in the country." (*Fairchild and Scofield.*)

7794. TRITICUM DURUM. **Wheat.**

From Setif, Constantine Province, Algeria. Received through Messrs. D. G. Fairchild and C. S. Scofield (No. 726, June 20, 1901), November 6, 1901.

Kahla. "This is one of the wheats commonly grown by Arabs throughout Algeria. As the name *Kahla* signifies, this is a black-chaffed sort. It is generally considered to be one of the best of the Algerian wheats for adaptability to a wide variety of adverse conditions. When such are favorable it produces grain of excellent quality for macaroni manufacture. Under certain favorable climatic conditions the chaff loses color somewhat, but under native culture on the gravelly hills of Algeria or in the semiarid plains the purple-black of the chaff is a striking feature. This seed is furnished the Department by Mr. G. Ryf, manager of the Geneva Society of Setif. Commonly planted in November or December and harvested in June or July." (*Fairchild and Scofield.*)

7795. TRITICUM DURUM. **Wheat.**

From Setif, Constantine Province, Algeria. Received through Messrs. D. G. Fairchild and C. S. Scofield (No. 727, June 20, 1901), November 6, 1901.

Richi. "This variety is one of the best known from the Setif region, which latter is perhaps the most important wheat-growing center of Algeria. It is very highly prized for its good qualities as a macaroni-making wheat. The seed introduced was grown by Arabs in the vicinity of Setif, and it may be mixed, but a little careful selection to prominent type should give a good stock of pure seed. This wheat is a vigorous grower, often succeeding fairly well on even very poor soil. As to quality for macaroni making, it ranks very high. It is usually sown in December or January and harvested in June or July, but might be worthy of trial in the spring-wheat region of the United States. Seed was obtained through Mr. G. Ryf, of Setif. The region of Setif is on the high Algerian plateau, 3,500 feet above sea level. The winters there are more severe than in many parts of Algeria, the temperature frequently dropping to zero and snow being not infrequent." (*Fairchild and Scofield.*)

7796. HORDEUM TETRASTICHUM. **Barley.**

From Setif, Constantine Province, Algeria. Received through Messrs. D. G. Fairchild and C. S. Scofield (No. 728, June 20, 1901), November 6, 1901.

Tetcherit. "The barleys of Algeria are nearly all four-rowed or six-rowed varieties and have, as do most barleys grown in hot climates, thick glumes. A cross section shows them to be remarkably mealy, and we were told they are exported into Antwerp and Dunkirk, France, for beer-making purposes. The Belgian beer is not noted for its fine quality, and from the appearance of the grain I do not believe it will prove as good a brewing barley as many American sorts. The fact, however, that it is grown in such a warm climate and has nevertheless a certain renommé as a brewing barley, entitles it to a preliminary trial. The types will be found more or less mixed, as no process of selection has been practiced. Resistance to drought will be found one of its primary characteristics. Purchased of Mr. G. Ryf, manager of the Geneva Company of Setif. This latter place is on the high plateau, 3,500 feet above the sea, where the thermometer falls to about zero and where snows of considerable depth sometimes occur. This variety will be found to have much of the 'wild' character objectionable to barley breeders, but may show qualities of hardiness in spring droughts which will be of value. It should be tested in the Southwest and in California." (*Fairchild and Scofield.*)

7797. ANDROPOGON SORGHUM. **Sorghum.**

From El Outaya, Algeria. Received through Mr. C. S. Scofield, November 14, 1901. Obtained June 16, 1901.

Beshna. "White sorghum. Sample from El Outaya in the edge of the Sahara Desert, where it is used as a summer growing soiling crop. Seed probably came from Kabylie, where this crop is very generally grown. The seed is sometimes used as human food." (*Scofield.*)

7798. PHOENIX DACTYLIFERA. **Date.**

From Paris, France. Received through Mr. C. S. Scofield. November 13, 1901.

Deglet noor, probably. Seeds of dates bought in Paris.

7799 to 7847.

From Erfurt, Germany. Received through Haage & Schmidt, nurserymen, November 4, 1901. The nomenclature is, in the main, that of the seedsmen.

A collection of plants as follows:

7799. CALADIUM ADAMANTINUM.

7800. CALADIUM ALBANENSE.

7801. CALADIUM ASSUNGUY.

7802. CALADIUM BILANTRA.

7803. CALADIUM CACAPAVA.

7804. CALADIUM.

Comte de Germiny.

7805. CALADIUM.

Duchesse de Mortemarte.

7806. CALADIUM.

Ibis Rose.

7807. CALADIUM.

L' Insolite.

7808. CALADIUM.

Mavambeia.

7809. CALADIUM.

Mary Freeman.

7810. CALADIUM.

Ouro Fino.

7811. CALADIUM.

Rio de Janeiro.

7812. CALADIUM VENOSUM.

7813. RICHARDIA ELLIOTTIANA.

7814. RICHARDIA NELSONI.

7815. RICHARDIA PENTLANDI.

7816. EPIPREMNUM MIRABILE.

7817. PHYLLOSTACHYS AUREA.

7818. BAMBUSA AUREO-STRIATA.

7819. ARUNDINARIA JAPONICA.

7820. PHYLLOSTACHYS MITIS.

7821. BAMBUSA DISTICHA.

7822. PHYLLOSTACHYS NIGRA.

7823. ARUNDINARIA SIMONI.

7799 to 7847—Continued.

7824. Phyllostachys violascens.

7825. Desfontainea spinosa.

7826. Sparrmannia africana.

7827. Sparrmannia africana flo. pl.

7828. Holbaellia latifolia.

7829. Testudinaria elphantipes.

7830. Cascarilla muzonensis(?)

7831. Cedrela odorata.

7832. Dorstenia contrajerva.

7833. Dracaena draco.

7834. Malpighia urens.

7835. Myristica Horsfieldii.

7836. Helleborus hybridus.

7837. Helleborus niger.

7838. Hepatica triloba fl. caerulea pl.

7839. (Number not utilized.)

7840. Hepatica triloba fl. rubra pl.

7841. Leucanthemum uliginosum.

7842. Viola odorata.
Princess Beatrix.

7843. Viola odorata.
Reine des Violettes.

7844. Viola odorata, rossica.

7845. Viola odorata.
Victoria Regina.

7846. Viola odorata.
Belle de Châtenay.

7847. Viola odorata.
Mad. Millet.

7848 to 7859. LILIUM. **Lily.**

From Yokohama, Japan. Received from Suzuki & Iida, American agents of The Yokohama Nursery Company, November 6, 1901.

A collection of lilies as follows:

7848. Lilium auratum rubra vittatum.

7849. Lilium auratum platyphyllum.

7850. Lilium auratum wittei.

7851. Lilium maculatum.

7852. Lilium browni.

7853. Lilium maximowiczii.

7854. Lilium longiflorum variegatum.

7855. Lilium speciosum.

7856. Lilium japonicum.

7857. Lilium elegans.
Alice Wilson.

7858. Lilium elegans semi pleno.

7859. Lilium rubellum.

7860 to 7901.

From near Berlin, Germany. Received from Mr. L. Spath, November 14, 1901.

A collection of plants as follows (nomenclature of Mr. Spath retained):

7860. Actinidia arguta.

7861. Amygdalus davidiana.

7862. Amygdalus davidiana fl. alba pl.

7863. Amygdalus persica dianthiflora pl.

7864. Aymgdalus persica fl. pl.

7865. Amygdalus persica fol. pur.

7860 to 7901—Continued.

7866. AMYGDALUS PERSICA.
Kaiser Friedrich III.

7867. AMYGDALUS PERSICA.
Klara Mayer.

7868. AMYGDALUS PERSICA PYRAMIDALIS.

7869. BERBERIS ILICIFOLIA.

7870. BERBERIS STENOPHYLLA.

7871. BERBERIS THUNBERGII MINOR.

7872. BUXUS HANDSWORTHIENSIS.

7873. CERATOSTIGMA PLUMBAGINOIDES.

7874. CERCIDIPHYLLUM JAPONICUM.

7875. CLEMATIS sp.
André Leroy.

7876. CLEMATIS sp.
Barillet Deschamps.

7877. CLEMATIS sp.
Belisaire.

7878. CLEMATIS sp.
Belle of Woking.

7879. CLEMATIS sp.
Blue Gem.

7880. CLEMATIS sp.
Claude de Lorraine.

7881. CLEMATIS sp.
Duchess of Edinburgh.

7882. CLEMATIS sp.
Edith Jackmann.

7883. CLEMATIS sp.
Fairy Queen.

7884. CLEMATIS sp.
Jackmani.

7885. CLEMATIS sp.
Jackmani alba.

7886. CLEMATIS sp.
La Gaule.

7887. CLEMATIS sp. LANUGINOSA.
Marie Defosse.

7888. CLEMATIS sp.
Mrs. Geo. Jackman.

7889. CLEMATIS sp.
Prince of Wales.

7890. CLEMATIS sp.
Lawsoniana.

7891. CLEMATIS sp.
Star of India.

7892. CLEMATIS sp.
Elsa Spath.

7893. CLEMATIS sp. RUBELLA.

7894. CLEMATIS sp.
Madam Granger.

7895. CLEMATIS sp.
Princess Mary.

7896. CLEMATIS sp. VELUTINA PURPUREA.

7897. LONICERA CAPRIFOLIUM.

7898. LONICERA HUMILIS.

7899. PARROTIA PERSICA.

7900. PRUNUS PANICULATA fl. ros. pl.

7901. RIBES SANGUINEUM.

7902 to 7907. THEA VIRIDIS. **Tea.**

From "Pinehurst," near Summerville, S. C. Received through Dr. Charles U. Shepard, special agent in charge of tea culture investigations, United States Department of Agriculture, November 18, 1901.

American grown tea seed as follows:

7902.

Japanese. Very hardy.

7903.

Amoy. A very hardy Chinese variety.

7904.

Darjeeling. Tender, but very fine.

7905.

Kangra. Hardy, fragrant, and dwarf.

7906.

Assam Hybrid. Good and reliable.

7907.

Chinese Dragon's Pool. Very good, but probably the plants are short lived.

7908. BETA VULGARIS. **Beet.**

From Eisleben, Saxony. Presented by Mr. Franz Jodl, of Prague, Bavaria. Received November 14, 1901.

Verbesserte Kleinwanzleben. This seed was grown by W. Ramdohr, on the Wimmelburg domain, Saxony.

7909 to 7941a. CHRYSANTHEMUM spp.

From Paris, France. Received from Vilmorin-Andrieux & Co., November 20, 1901.

A collection of 34 varieties of large-flowering chrysanthemums, planted in the Department greenhouses.

7909.

Alcon.

7910.

Alcyone.

7911.

Altair.

7912.

Antares.

7913.

Bellatrix.

7914.

Fatinte.

7915.

Henry.

7916.

Megrez.

7917.

Orves.

7918.

Perfection Rose.

7919.

Perle.

7920.

Princesse Galitzine.

7921.

Mrs. A. Barrest.

7922.

Miss Ida Barwood.

7923.

Mrs. Ch. Birch.

7924.

Alice F. Carey.

7925.

Miss Lucy Chesseman.

7926.

Col. Baden-Powell.

7909 to 7941a—Continued.

7927.
M. Hugh Crawford.

7928.
Madeline Davis.

7929.
Lady Janet Clarke.

7930.
Lord Cromer.

7931.
Major Mathew.

7932.
Meredith.

7933.
Mermaid.

7934.
Florence Molyneux.

7935.
James Molyneux.

7936.
Onion.

7937.
Ralph Hatton.

7938.
Silver Queen.

7939.
Souvenir de Marchioness of Salisbury.

7940.
J. R. Upton.

7941.
Von Andre.

7941a.
Henry Weeks.

7942 to 7945.

From Paris, France. Received through Vilmorin-Andrieux & Co., November 22, 1901.

Seeds of leguminous plants as follows (nomenclature of seed firm retained):

7942. VICIA FABA EQUINA. **Horse bean.**
Féverole d'hiver.

7943. VICIA FABA EQUINA. **Horse bean.**
Féverole de Loraine.

7944. AVENA SATIVA. **Oat.**
Belgian Winter.

7945. MEDICAGO MEDIA. **Sand lucern.**
Luzerne rustique.

7946. ERIOBOTRYA JAPONICA. **Loquat.**

From Vomero, Naples, Italy. Received through Dr. C. Sprenger, November 27, 1901.

A seedless or one-seeded variety originated by Doctor Sprenger.

7947 and 7948.

(Numbers not utilized.)

7949. PISTACIA VERA. **Pistache.**

From Aintab, Turkey in Asia. Received through Rev. A. Fuller, November 15, 1901.

7950. PISTACIA VERA × PALAESTINA. **Butum.**

From Aintab, Turkey in Asia. Received through Rev. A. Fuller, November 15, 1901.

7951. PISTACIA MUTICA. **Menengech.**

From Aintab, Turkey in Asia. Received through Rev. A. Fuller, November 15, 1901.

7952. MEDICAGO GETULA.

From Mustapha, Algeria. Received through Dr. L. Trabut, Government Botanist, November 22, 1901.

7953. JUGLANS CINEREA. **Butternut.**

From Biltmore, N. C. Received through Dr. C. A. Schenck, November 25, 1901.

7954. JUGLANS NIGRA. **Black walnut.**

From Biltmore, N. C. Received through Dr. C. A. Schenck, November 25, 1901.

7955 and 7956. ABERIA CAFFRA. **Kei apple.**

From Cape Town, South Africa. Presented by Prof. Peter MacOwan, botanist and horticulturist, department of agriculture of Cape Colony. Received November 26, 1901.

7955. Seeds gathered in June, 1901.

7956. Seeds gathered October 30, 1901.

7957 to 7961.

From Paris, France. Received through Vilmorin-Andrieux & Co., November 30, 1901.

A collection of asparagus seed as follows:

7957. ASPARAGUS OFFICINALIS.

Violette de Hollande.

7958. ASPARAGUS OFFICINALIS.

Blanche d' Allemagne.

7959. ASPARAGUS OFFICINALIS.

Tardive d' Argenteuil.

7960. ASPARAGUS VERTICILLATUS.

Grimpante.

7961. ASPARAGUS SPRENGERI.

7962 to 7968.

From Mexico. Received through Dr. J. N. Rose (Nos. 345 to 351), U. S. National Museum, November 26, 1901.

A collection of Mexican seeds and plants as follows:

7962.

"Unknown variety of shrubby plant. Elevation nearly 6,000 feet. Flowers yellow and fine. Plant given for identification." (*Rose.*) (No. 345.)

7963. CHRYSANTHEMUM sp.

"Flowers white and very floriferous. Worthy of introduction." (*Rose.*) (No. 346.)

7964. COSMOS sp.

"Includes three or four varieties of *Cosmos* and seeds of two new plants, one of the latter tuberous rooted and valuable." (*Rose.*) (No. 347.)

7962 to 7968—Continued.

7965.

"New tuberous-rooted plant." (*Rose.*) (No. 348.)

7966. Dahlia silvestre.

"Red and yellow; single. I also send tubers." (*Rose.*) (No. 349.)

7967. Dahlia sp.

"*Red.*" (*Rose.*) (No. 350.)

7968. Dahlia sp.

"*Yellow.*" (*Rose.*) (No. 351.)

7969 and 7970. Hordeum vulgare. **Barley.**

From Smyrna, Asia Minor. Received through Mr. George C. Roeding, Fresno, Cal., from Mr. B. J. Agadjanian, of Smyrna, November 15, 1901.

7969. *White.*

7970. *Black.*

7971. Crescentia alata.

From Jalisco, Mexico. Received through Mr. Elmer Stearns, Los Angeles, Cal., November 15, 1901.

7972. Cucumis melo. **Winter muskmelon.**

From Zante, Greece. Presented by Count N. Salamo Lunzi through Mr. D. G. Fairchild. Received September 25, 1901.

Green. See No. 6363.

7973. Lespedeza bicolor. **Bush clover.**

From Japan. July, 1901. Presented by John D. Jones, esq., Augusta, Ga., through Dr. B. T. Galloway.

Said to be a fine fodder plant.

7974. Canavalia ensiformis. **Knife bean.**

From Japan. Received through Dr. B. T. Galloway, July, 1901.

7975 to 7984.

From Erfurt, Germany. Received through Haage & Schmidt, December 6, 1901.

A collection of seeds obtained for experimental work on rust diseases, being conducted by Mr. John L. Sheldon, of the University of Nebraska:

7975. Asparagus officinalis.

Schneekopf.

7976. Asparagus officinalis.

Ruhm von Braumschweig.

7977. Asparagus officinalis.

Erfurt Giant.

7978. Asparagus officinalis.

Burgunder Riesen.

7979. Dianthus alpinus.

7980. Dianthus arenarius (?)

7981. Dianthus armeria (?)

7982. Dianthus chinensis.

7983. Dianthus chinensis.

7984. Dianthus chinensis.

7985 to 7989. AMYGDALUS COMMUNIS. **Almond.**

From Alicante, Spain. Received through Mr. D. G. Fairchild (Nos. 740-765), December 7, 1901.

A collection of young almond trees budded on Myrobolan stocks by M. Georges Boucher, Paris, France, with buds secured in Spain by Mr. Fairchild, as follows:

7985.

Mollar. (*Fairchild.* No. 740, July 19, 1901.)

7986.

Planeta. (*Fairchild.* No. 741, July 19, 1901.)

7987.

Castillet. (*Fairchild.* No. 745, July 20, 1901.)

7988.

Pastaneta. (*Fairchild.* No. 755a, July 19, 1901.)

7989.

Jordan. (*Fairchild.* No. 765, July 30, 1901.)

7990 and 7991. HICORIA PECAN. **Pecan.**

From Morgan City, La. Received through Mr. B. M. Young, December 7, 1901.

7990.

Frotscher. "Very large, soft shelled." (*Young.*)

7991.

Stuart. "Very large, soft shelled." (*Young.*)

7992. HORDEUM DISTICHUM. **Barley.**

From Munich, Bavaria. Received through Mr. D. G. Fairchild (No. 467, November 10, 1900), January, 1901.

"A variety of barley grown by Mich. Hartmann, of Mainstockheim, Bavaria, which took a prize at the Munich Barley and Hop Exposition, 1900." (*Fairchild.*) (See Nos. 5788-5792.)

7993 to 8071. VITIS VINIFERA. **Grape.**

From Thomery, France. Received through Etienne Salomon & Sons, December 11, 1901.

A collection of grafted grapevines, as follows:

7993. ADMIRAL DE COURTILLER on RIPARIA RUPESTRIS, 3309.

7994. AGOSTENGA on RIPARIA RUPESTRIS, 3306.

7995. BICANE on RIPARIA GLOIRE.

7996. BLACK ALICANTE on RIPARIA RUPESTRIS, 3306.

7997. BLANC D'AMBRE on RIPARIA RUPESTRIS, 3306.

7998. CHASSELAS DORÉ on RIPARIA GLOIRE.

7999. CHASSELAS CIOTAT on RIPARIA RUPESTRIS, 3306.

8000. CHASSELAS BOUCHES DU RHONE on RIPARIA RUPESTRIS, 3309.

8001. CHASSELAS BESSON on RIPARIA RUPESTRIS, 3306.

8002. CHASSELAS NEGROPONT on RIPARIA GLOIRE.

7993 to 8071—Continued.

8003. CHASSELAS DUHAMEL on ARAMON RUPESTRIS, G. No. 1.

8004. CHASSELAS MUSQUE VRAI on RUPESTRIS DU LOT.

8005. CHASSELAS NAPOLEON on RIPARIA RUPESTRIS, 3306.

8006. CHASSELAS ROSE ROYAL on ARAMON RUPESTRIS, G. No. 1.

8007. CHASSELAS TOKAY DES JARDINS on ARAMON RUPESTRIS, G. No. 1.

8008. CHASSELAS VIBERT on RIPARIA RUPESTRIS, 3306.

8009. CHASSELAS VIBERT on ARAMON RUPESTRIS, G. No. 1.

8010. CINSAULT on RIPARIA GLOIRE.

8011. CLAIRETTE GROS GRAINS on RIPARIA RUPESTRIS, 3306.

8012. CLAIRETTE MAZEL on RIPARIA GLOIRE.

8013. CLAIRETTE MAZEL on ARAMON RUPESTRIS, G. No. 1.

8014. CLAIRETTE MUSQUE TALABOT on ARAMON RUPESTRIS, G. No. 1.

8015. CORNICHON BLANC on RIPARIA GLOIRE.

8016. CORNICHON VIOLET on RIPARIA GLOIRE.

8017. CORNICHON VIOLET on ARAMON RUPESTRIS, G. No. 1.

8018. FOSTER'S WHITE SEEDLING on RIPARIA GLOIRE.

8019. FRANKENTHAL HATIF on RIPARIA RUPESTRIS, 101–114.

8020. GEN. DE LA MARMORA on RIPARIA RUPESTRIS, 3306.

8021. GOLDEN CHAMPION on ARAMON RUPESTRIS, G. No. 1.

8022. GRADISKA on RIPARIA GLOIRE.

8023. JOANNENC CHARNU on ARAMON RUPESTRIS, G. No. 1.

8024. LE COMMANDEUR on RIPARIA RUPESTRIS, 3306

8025. MADELEINE BLANCHE on RIPARIA RUPESTRIS, 3306.

8026. MADELEINE BLANCHE DE JACQUES on ARAMON RUPESTRIS, G. No. 1.

8027. MADELEINE ROYALE on RIPARIA RUPESTRIS, 3306.

8028. MADELEINE ROSE on RIPARIA GLOIRE.

8029. MALAGA BLANC on RUPESTRIS DU LOT.

8030. MAMELON on RIPARIA RUPESTRIS, 3306.

8031. MESLIER HATIF on ARAMON RUPESTRIS, G. No. 1.

8032. MORILLON BICOLOR on RIPARIA RUPESTRIS, 3306.

8033. MUSCAT ALBARIANS on RUPESTRIS DU LOT.

8034. MUSCAT BIFERE on ARAMON RUPESTRIS, G. No. 1.

8035. MUSCAT BIFERE on RIPARIA RUPESTRIS, 3306.

8036. MUSCAT DE HAMBURGH on RUPESTRIS DU LOT.

7993 to 8071—Continued.

8037. Muscat rouge de madere on Riparia rupestris, 3306.

8038. Petite st. jean on Riparia gloire.

8039. Pis de chevre des alpes on Riparia rupestris, 3306.

8040. Precoçe de kientzheim on Riparia gloire.

8041. Rosaki on Riparia rupestris, 3306.

8042. Raisin Boisselot on Riparia rupestris, 3306.

8043. Roussanne on Riparia rupestris, 3306.

8044. Saint Antonio on Riparia gloire.

8045. Satine Jaune on Riparia rupestris, 3306.

8046. Servan blanc on Riparia rupestris, 3306.

8047. Sicilien on Riparia, G. No. 1.

8048. Souvenir du Congress on Riparia rupestris, 3306.

8049. Sucre de Marseille on Riparia rupestris, 3306.

8050. Sultanieh Rose on Riparia rupestris, 3306.

8051. Teneron Vaucluse on Rupestris du Lot.

8052. Tokay Angevin on Riparia gloire.

8053. Trentham Black on Riparia rupestris, 3306.

8054. Chasselas vibert on Aramon rupestris, G. No. 1.

8055. Burgrave de Hongrie on Rupestris du Lot.

8056. Pis de Chevre noir on Rupestris du Lot.

8057. Verdelho de Madere on Riparia gloire.

8058. Sultanina on Rupestris du Lot.

8059. Leani Zolo on Rupestris du Lot.

8060. President Cardenaux on Rupestris du Lot.

8061. Sauvignon blanc on Rupestris du Lot.

8062. Tsien tsien on Mourvedre Rupestris, 202.

8063. Ulliade blanche on Rupestris du Lot.

8064. Chasselas Bulhery on Riparia gloire.

8065. Precoçe de Kientzheim on Riparia gloire.

8066. Seibel No. 1, American hybrid.

8067. Seibel No. 2, American hybrid.

8068. Bourrisquou 3907, American hybrid.

8069. Aramon rupestris G. No. 1, American Lot.

7993 to 8071—Continued.

8070. Olivier de Serres on Aramon rupestris, G. No. 1.

8071. Olivette de Cadenet on Riparia rupestris, 3306.

(By "American Lot" is understood in France the stock on which the European Lot is grafted.)

8072 to 8121. Paeonia moutan. **Tree peony.**

From Yokohama, Japan. Received through the Yokohama Nursery Company, November 23, 1901.

A collection of grafted plants as follows:

8072.
Yoyo-no-homare.

8073.
Yaso-okino.

8074.
Kamadafuji.

8075.
Kumoi-dsuru.

8076.
Gioku-sho-kaku.

8077.
Aduma-saki.

8078.
Nishiki-gawa.

8079.
(Number not utilized.)

8080.
Kumoma-no-tsuki.

8081.
Fuji-araski.

8082.
Adzuma-nishiki.

8083.
Ginfukurin.

8084.
Michi-shiba.

8085.
Renkaku.

8086.
Kagurajima.

8087.
Kumo-no-nishiki.

8088.
Anyoji.

8089.
Iwato-Kagami.

8090.
Yuki-arashi.

8091.
Kokirin.

8092.
Akasho-jishi.

8093.
Hakubanrya.

8094.
Hakugan.

8095.
Hinode-dsuru.

8096.
Tokiwadsu.

8097.
Asahi-minato.

8098.
Ruriban.

8099.
Kame-asobi.

8100.
Saishoji.

8101.
Konron-koku.

8072 to 8121—Continued.

8102.
Akashi-gata.

8103.
Bunbudo.

8104.
Nishikishima.

8105.
Adzumakagami.

8106.
Fuji-no-mine.

8107.
Hana-tachabana.

8108.
Shishi-gashiri.

8109.
Shi-un-ryu.

8110.
Gabisan.

8111.
Shoki-kaguru.

8112.
Gioku-senshin.

8113.
Seirin.

8114.
O-sakadasuki.

8115.
Fukashigi.

8116.
Kausenden.

8117.
Daikagura.

8118.
Muhensai.

8119.
Saigyo sakura.

8120.
Momo-zono.

8121.
Ivo-no-seki.

8122 to 8188.

From Yokohama, Japan. Received through Suzuki & Iida, American agents of The Yokohama Nursery Company, New York, December 13, 1901.

A collection of plants as follows (the nomenclature in the main is that of the nursery company):

8122. Michelia compressa.

8123. Clerodendron squamatum.

8124. Deutzia sieboldiana.

8125. Styrax japonica.

8126. Styrax obassia.

8127. Ligustrum ciliatum.

8128. Pittosporum tobira.

8129. Quercus acuta.

8130. Quercus cuspidata.

8131. Quercus dentata.

8132. Quercus dentata aurea.

8133. Quercus glandulifera.

8134. Quercus glauca.

8135. Quercus lacera (?)

8136. Quercus laevigata (?)

8137. Quercus phillyreoides.

8138. Quercus pinnatifida.

8139. Quercus serrata.

8140. Ginkgo biloba variegata.

8141. Chamaecyparis obtusa, var. Kamukura-hiba.

8142. Chamaecyparis obtusa, var. Hotaru-hiba.

8122 to 8188—Continued.

8143. Chamaecyparis obtusa, var. Embi-hiba.

8144. Chamaecyparis obtusa, var. Kana-ami.

8145. Daphne genkwa.

8146. Edgeworthia gardneri.

8147. Kadsura japonica.

8148. Kadsura japonica, spotted.

8149. Kadsura japonica, white variegated.

8150. Acer tanabata.

Various cultural varieties.

8151. Acer sanguineum.

8152. Acer atropurpureum.

8153. Acer oshiu-beni.

8154. Acer japonicum.

8155. Acer sanguineum, Seigen.

8156. Acer roseum.

8157. Acer versicolor.

8158. Acer osaka-zuki.

8159. Acer atro-dissectum variegatum.

8160. Acer atropurpureum dissectum.

8161. Acer reticulatum.

8162. Acer okushimo.

8163. Acer atro-dissectum (green).

8164. Acer urime.

8165. Acer kinukasayama.

8166. Acer aoba.

8167. Acer hatcuyuki kaido.

8168. Acer aureum.

8169. Acer scolopendrifolium rubrum.

8170. Acer scolopendrifolium (green).

8171. Acer atropurpureum variegatum.

8172. Acer akikaze-nishiki.

8173. Acer rosa-marginatia.

8174. Acer carpinifolium.

8175. Acer trifidum.

8176. Acer rufinerve.

8177. Acer tsumagaki.

8178. Acer tsuru-nishiki.

8179. Acer musatoriyama.

8180. Acer pictum album.

8181. Acer japonicum filicifolium.

8182. Acer nishikigasane.

8183. Acer pictum aureum.

8184. Acer murakumo.

8185. Acer komonuishiki.

8186. Acer japonicum.

8187. Acer japonicum.

8188. Acer japonicum.

8189 to 8192.

From Yokohama, Japan. Received through Suzuki & Iida, American agents of the Yokohama Nursery Co., New York City, December 17, 1901.

A collection of seeds as follows:

8189. Hamamelis japonica.

8190. Sterculia platanifolia.

8191. Xanthoxylon piperitum.

8192. Podocarpus macrophylla.

8193 to 8199.

From Lucknow, India. Received through the Government Horticultural Garden, December 16, 1901.

A collection of plants as follows:

8193. BOMBAX MALABARICUM.

8194. CLAUSENA EXCAVATA.

8195. DILLENIA SPECIOSA.

8196. FICUS INDICA.

8197. STIGMAPHYLLON PERIPLOCAEFOLIUM.

8198. RONDELETIA CHINENSIS.

8199. RUSCUS HYPOPHYLLUM.

8200 to 8203. HICORIA PECAN. **Pecan.**

From Ocean Springs, Miss. Received through The Stuart Pecan Company, December 21, 1901.

8200.

Russell.

8201.

Stuart.

8202.

Jewett.

8203.

Van Deman.

8204. PISTACIA VERA × PISTACIA TEREBINTHUS.

From San Francisco, Cal. Received through Mr. W. T. Swingle from Mr. G. P. Rixford, secretary of the California Academy of Sciences, December 23, 1901.

8205 and 8206.

From Paris, France. Received through Vilmorin-Andrieux & Co., December 27, 1901.

8205. CINCHONA OFFICINALIS.

8206. AGATHIS AUSTRALIS.

8207. COFFEA ARABICA. **Coffee.**

From Macassar, Celebes. Received through Messrs. Lathrop and Fairchild from Hon. Karl Auer, United States Consul, December 28, 1901.

Timor.

8208. JUGLANS REGIA. **Walnut.**

From Zante, Greece. Presented by Mr. Alfred L. Crow, through Mr. D. G. Fairchild, January 6, 1902.

Large Zante.

8209. CYDONIA SINENSIS. **Chinese quince.**

From Zante, Greece. Presented by Mr. Alfred L. Crow, through Mr. D. G. Fairchild. Received January 6, 1902.

Scented quince.

8210. CITRUS NOBILIS × CITRUS BIGARADIA. **Orange.**

From Mustapha, Algiers, Algeria. Received through Dr. L. Trabut, Government Botanist, January 7, 1902. (A second packet January 14, 1902.)

Clementine. A hybrid of *Citrus nobilis* and *Citrus bigaradia sinensis salicifolia*, var. *granito.*

"Fruit very fine and beautiful. I recommend it." (*Trabut.*)

8211. COFFEA ARABICA. **Coffee.**

From Macassar, Celebes. Received through Messrs. Lathrop and Fairchild, from Hon. Karl Auer, United States Consul, January 7, 1902.

Chemnitz (?).

8212 and 8213. TRITICUM DURUM. **Wheat.**

From Uralsk, Russia. Purchased from the Ural Millers' Association. Received January 9, 1902.

8212.

Kubanka. Crop of 1900.

8213.

Kubanka. Crop of 1901.

8214. PROSOPIS JULIFLORA. **Mesquite.**

From Honolulu, Hawaiian Islands. Received through Mr. Jared G. Smith, director of the agricultural experiment station, January 10, 1902.

8215. POLYGONUM TATARICUM. **India wheat.**

From the Himalaya Mountains. Received through Dr. C. Sprenger, Vomero, near Naples, Italy, January 15, 1902.

"A large growing specimen." (*Sprenger.*)

8216 to 8218. CYPERUS ESCULENTUS. **Chufa.**

From Spain. Received through Mr. D. G. Fairchild (No. 772, Aug. 9, 1901), January 14, 1902. Secured through kindness of Hon. R. M. Bartleman, United States Consul at Valencia.

"Chufa cultivation in southeastern Spain is one of its most profitable industries; the underground tubers are used to make the *Horchata de chufas*, a favorite ice, sold very extensively in all the large cities in Spain." (*Fairchild.*)

8216.

From Alboraya.

8217.

From Balasuar.

8218.

From Algemese.

8219. CUCUMIS MELO. **Winter muskmelon.**

From Valencia, Spain. Received through Mr. D. G. Fairchild (No. 772, August 9, 1902), January 14, 1902.

8220 and 8221. TRITICUM VULGARE. **Wheat.**

From northern China. Received through Mr. G. D. Brill, January 17, 1902.

8220.

Red.

8221.

White.

8222 to 8225. AGARICUS CAMPESTRIS. **Mushroom.**

From Paris, France. Received through Dr. B. M. Duggar, January 18, 1902.

Mushroom spawn from Vilmorin-Andrieux & Co., as follows:

8222.

Triple. Virgin spawn, white variety.

8223.

Double. Virgin spawn, brown variety.

8224.

Ordinaire. Virgin spawn, brown variety.

8225.

Crop spawn, brown variety.

8226 to 8228. THEA VIRIDIS. **Tea.**

From Heneratgoda, Ceylon. Received through J. P. William & Bros., January 18, 1902.

Tea seed, as follows:

8226.

"Assam hybrid tea seed of highest class *Jat*, light leaf variety from Invery Estate, Dickoya, Ceylon, elevation 4,500 feet." (*William.*)

8227.

"Highest class *Jat* Assam Hybrid tea seed from Abbotsford Estate, Dimbulla, Ceylon, elevation 5,500 feet." (*William.*)

8228.

"Pure Manipuri indigenous tea seed, of highest class *Jat*, from Pen-y-len Estate, Dolosbage, Ceylon, over 4,000 feet elevation." (*William.*)

8229. BETA VULGARIS. **Sugar beet.**

From Wimmelburg, near Eisleben, Germany. Presented by Frantisek Jodl, Prague, Bohemia, January 18, 1902.

Kleinwanzleben improved.

8230 to 8232. TRITICUM DURUM. **Wheat.**

From Ambrocievka, Russia. Received from the estate of A. Michalkov, January 21, 1902.

Macaroni wheats as follows:

8230.

Yellow Gharnovka.

8231.

Velvet Don. (Chernouska.)

8232.

Black Don. (Chernokoloska.)

8233 to 8236. ERIOBOTRYA JAPONICA. **Loquat.**

From Mustapha, Algiers, Algeria. Received through Messrs. D. G. Fairchild and C. S. Scofield (Nos. 690 to 693), January 22, 1902.

8233.

Marcadal. "A nearly seedless variety from the Rev. Mr. Arkwright's garden." (*Fairchild.*)

8234.

Olivier. "From the Rev. Mr. Arkwright's garden. Fruits weigh over 52$\frac{2}{5}$ grams apiece." (*Fairchild.*)

8235.

St. Michele. "From the Rev. Mr. Arkwright's garden. Said to weigh as much as 75 grams." (*Fairchild.*)

8236.

Meffre's No. 2. "Said by its originator, M. Henri Meffre, of El Merdj, to exceed in size any of the foregoing and to be of excellent quality." (*Fairchild.*) No. 693.

8237. MINA TRILOBATA.

From Mustapha, Algiers, Algeria. Received from Meffre & Salom Sons, January 22, 1902.

8238. Beta vulgaris. **Sugar beet.**

From Athensleben bei Löderburg, Germany. Received through H. Bennecke & Son, January 23, 1902.

Kleinwanzlebener Nachzucht. This seed was presented to Dr. H. W. Wiley, Chief of Bureau of Chemistry, United States Department of Agriculture.

8239. Solanum dregei. **Natal thorn.**

From Los Angeles, Cal. Received through Mr. Elmer Stearns, January 24, 1902.

Grown from seed of No. 1987, Inventory No. 5.

8240. Spondias lutea. **Ciruela amarillo.**

From Iguala, Guerrero, Mexico. Received through Mr. Elmer Stearns, Los Angeles, Cal., January 24, 1902.

8241 to 8298.

From Nice, France. Received through Mr. A. Robertson-Proschowsky, January 27, 1902.

A collection of seeds as follows: The determination of these species is that of Mr. Robertson-Proschowsky.

8241. Agapanthus umbellatus.

8242. Agave lophantha, Schiede?

8243. Albizzia lophantha.

8244. Arbutus unedo.

8245. Aristolochia elegans.

8246. Artemisia argentea.

8247. Araujia sericifera Brot.?

8248. Asparagus sprengeri.

8249. Bignonia tweediana.

8250. Cardiospermum halicacabum.

8251. Carica quercifolia.

8252. Cassia corymbosa.

8253. Cassia occidentalis (?)

8254. Casuarina equisetifolia.

8255. Ceanothus azureus Desf. (hybridus Hort.)

Gloire de Versailles.

8256. Clerodendron hastatum.

8257. Cordyline australis.

Cordyline indivisa of the trade.

8258. Dolichos lablab.

8259. Eremocarpus scaber.

8260. Elaeagnus pungens var. simoni.

8261. Nicotiana glauca.

8262. Olearia haasti.

8263. Passiflora pruinosa.

8264. Perimedium discolor (?)

8265. Phoenix reclinata.

8266. Phoenix pumila × Phoenix reclinata.

"Fruits of rather good taste when fresh. In moist climates, like Florida, other species than *Phoenix dactylifera* might in time, through selection and hybridization, produce good varieties." (*Proschowsky.*)

8267. Phormium tenax.

8268. Plectranthus striatus (?)

8269. Podachaenium paniculatum.

8270. Polygonum lanigerum.

8271. Porana racemosa (?) Roxb.

8272. Prosopis glandulosa (?)

8241 to 8298—Continued.

8273. Richardia africana Kth.

8274. Richardia albo-maculata.

8275. Ricinus communis, var. 1.

8276. Ricinus communis, var. 2.

8277. Ruscus hypoglossum.

8278. Schinus molle.

8279. Senecio longifolius.

8280. Solanum sp.

8281. Solanum laciniatum Ait. (S. reclinatum l'Herit).

8282. Solanum marginatum.

8283. Solanum pseudocapsicum.

8284. Solanum warszewiczii.

8285. Sollya heterophylla.

8286. Thalia dealbata.

8287. Vitex incisa.

8288. Wigandia sp. (hybrid?)

8289. Euphorbia sp.

8290. Ficus macrophylla.

8291. Gomphocarpus textilis.

8292. Globularia salicina Lam.

8293. Hedychium gardnerianum Rosc.

8294. Jacaranda ovalifolia.

8295. Iochroma tabulosa Benth.

8296. Ligustrum japonicum.

8297. Mesembryanthemum acinaciforme.

8298. Mespilus germanica. **Medlar.**

8299. Medicago elegans.

From Mustapha, Algiers, Algeria. Received through Dr. L. Trabut, Government Botanist, January 27, 1902.

8300 to 8306. Oryza sativa. **Rice.**

From Kobe, Japan. Received through Dr. S. A. Knapp, January 27, 1902.

Seed rice as follows, Japanese names being given:

8300.

Shinriki. From Hyogo district.

8301.

Shiratama. From Fukuoka district.

8302.

Komachi. From Kumamoto district.

8303.

Omase. From Kumamoto district.

8304.

Miyako. From Yamaguchi district.

8305.

From Chiugoku district.

8306.

From Chikuzen district.

8307. Juglans regia. **Walnut.**

From Aintab, Asia Minor. Received through Rev. A. Fuller, January 28, 1902.

Wild Persian walnuts.

8308 to 8310. CUCUMIS MELO. **Muskmelon.**

From Lisbon, Portugal. Received through Señor Abel Fontoina da Costa, January 30, 1902.

8308.

Amarello.

8309.

Alpiaca.

8310.

Palha (Valentien).

8311. KHAYA SENEGALENSIS. **African mahogany.**

From Mount Silinda, Melsetter district, Rhodesia, South Africa. Received through Dr. Wm. L. Thompson, January 31, 1902.

Ubaba. This is one of the finest timber trees of South Africa, growing to a large size, sometimes 6 feet or more in diameter. Resists the attacks of insects and is very durable. Generally grows near streams, but is also found in other places. Called by the natives "Ubaba," from the bitter bark.

8312. SIMMONDSIA CALIFORNICA. **Jojoba.**

From Las Flores, Lower California, Mexico. Received through Mr. F. Plunk, jr., January 30, 1902.

8313 to 8329.

From Erfurt, Germany. Received through Haage & Schmidt, February 1, 1902.

A collection of seeds as follows:

8313. CARYOTA MITIS.

8314. COCOS YATAY.

8315. CHRYSALIDOCARPUS LUTESCENS.

8316. PYRETHRUM ROSEUM.

8317. LEUCADENDRON ARGENTEUM.

8318. CINNAMOMUM sp.

8319. PAPAVER BRACTEATUM.

8320. PHORMIUM TENAX.

8321. COCOS DATIL.

8322. EUTERPE EDULIS.

8323. OREODOXA REGIA.

8324. CHAMAEDOREA SARTORI.

8325. OREODOXA OLERACEA.

8326. ACANTHOPHOENIX CRINITA.

8327. KENTIOPSIS MACROCARPA.

8328. BEGONIA REX × DIADEMA.

8329. KENTIA MACARTHURI. (Horticultural variety.)

8330. AMYGDALUS PERSICA. **Peach.**

From near North Gate, Canton, China. Received through Messrs. Lathrop and Fairchild (No. 774, December 20, 1901), February 3, 1902.

"A variety of peach growing in a Chinese orchard at Ngau lan Kong. The habit of this tree resembles that of an apricot, and, although I saw none of the fruit, I believe it is quite a distinct type from the ordinary Eagle Beak peach, which is the common variety about Canton. I was not able to get a name for this variety." (*Fairchild.*)

8331 to 8334. AMYGDALUS PERSICA. **Peach.**

Eagle Beak peach from Canton, China. Received through Messrs. Lathrop and Fairchild (No. 775, December 20, 1901), February 3, 1902.

"From orchard trees growing near the Great North Gate of Canton, at Ngau lan Kong, of the *Ying tsui t'o* or Eagle Beak peach. This variety resembles the Honey closely, except that the pointed tip of the fruit is more curved, according to Dr. J. M. Swan, of the Canton Hospital. I saw no specimen myself. According to Doctor Swan's gardener this variety blooms in March and April, while other sorts here bloom in February. The peach is said to be very sweet, even inclined to be a bit mawkish in flavor. The fruit is brought to the market some time early in July. The market for peaches in Canton is a short one, being in all not over five weeks—the last three weeks of June and the first two weeks of July. The *Peen t'o* type of peach is unknown here in Canton, so far as I can ascertain. It certainly must be a rare form here if it occurs at all. These cuttings were taken from small commercial orchards, and, it being winter, I am obliged to take the identification through an interpreter that they are the Eagle Beak. To insure getting all the varieties in the orchard, I got several lots from the different parts of the orchard. These I have marked 775, a, b, c, respectively. The numbers 8331, 8332, 8333, and 8334 correspond with these numbers. This peach is not larger than the Honey, but may prove later blooming and be valuable on this account." (*Fairchild.*)

8335. MORUS MULTICAULIS. **Chinese mulberry.**

From Canton, China. Received through Messrs. Lathrop and Fairchild (No. 776), February 3, 1902.

"A variety of mulberry cultivated for its leaf, used in feeding silkworms. The method of culture is to plant the cuttings deep in the ground, leaving two buds above the soil. The plant is never allowed to make a tree, but is cut down every year to the ground. The plants are only 6 to 8 inches apart, in rows 1½ feet from one another." (*Fairchild.*)

8336. POPULUS sp. (?) **Poplar.**

From Canton, China. Received through Messrs. Lathrop and Fairchild (No. 777, December 20, 1901), February 3, 1902.

"A low growing poplar with small leaves of a peculiar, truncated shape, which color up in December here in southern China a beautiful wine red. The splashes of color which this poplar gives to the landscape are very beautiful and the species is worth growing as an ornamental for this purpose alone." (*Fairchild.*)

8337. AMYGDALUS PERSICA. **Peach.**

From Canton, China. Received through Messrs. Lathrop and Fairchild (No. 778, December 20, 1901), February 3, 1902.

Ying tsui t'o. "Eagle Beak peach from a garden at Fati, opposite the island of Shameen. Probably much the same as Nos. 8331 to 8334, but as all these peaches seem to be grown from seed and are not grafted it may be slightly different." (*Fairchild.*)

8338. PRUNUS sp. **Red plum.**

From Canton, China. Received through Messrs. Lathrop and Fairchild (No. 779, December 20, 1901), February 3, 1902.

Hung Mui. "The flower and fruit are both said to be red and the latter to be an inch or more in diameter. It flowers somewhat later than the *Tsing Mui*, which is beginning to bloom now. This is from Yat Chun garden, at Fati, near Canton. These Chinese plums are said to be good canners, but likely to have a bitter taste on standing. They are not highly prized by the Europeans, who say they are hard and have a tendency to be astringent. The trees I saw at Fati were not remarkable, except for the great vigor of some young shoots springing from the old trunk which had been cut down. I can not vouch positively for the name of the variety as I worked through an interpreter." (*Fairchild.*)

8339. PRUNUS sp. **Plum.**

From Canton, China. Received through Messrs. Lathrop and Fairchild (No. 780, December 20, 1901), February 3, 1902.

Nam Wa Li. "A variety of plum called the Southern Glorious plum, according to Dr. J. M. Swan's translation. It is a red plum, about three-fourths of an inch in diameter, quite round, skin not tough, seed small. The sauce made from this variety turns bitter if left to stand for even an hour. If the tree is given good culture it produces fruits 1½ inches in diameter. It flowers in March. The tree I saw was quite vigorous and not grafted." (*Fairchild.*)

8340. AMYGDALUS PERSICA. **Peach.**

From Canton, China. Received through Messrs. Lathrop and Fairchild (No. 781, December 20, 1901), February 3, 1902.

Pak Wat tim t'o. "A slightly sweet, white stone variety of rather small size, preferred by some to the *Ying tsui t'o,* which, it is said, has too sweet a flavor. It has no beak like the latter, but is a typical south Chinese shape, according to Dr. J. M. Swan, of the Canton Hospital, who very kindly described this variety." (*Fairchild.*)

8341. DIOSPYROS KAKI. **Persimmon.**

From Canton, China. Received through Messrs. Lathrop and Fairchild (No. 782, December 20, 1901), February 3, 1902.

Hung tsi. "A soft persimmon, of dark-red color, which is preferred by many Europeans to the hard type that is only edible after soaking in water for an hour. This is grown at Fati, near Canton." (*Fairchild.*)

8342. PRUNUS sp. **Plum.**

From Canton, China. Received through Messrs. Lathrop and Fairchild (No. 783, December 20, 1901), February 3, 1902.

Pak Mui. "A white plum, according to the interpreter. The tree is a fairly vigorous grower and abundant producer of flowers. It is not cultivated extensively here, so far as I can find out, and I have been unable to get a description of the variety." (*Fairchild.*)

8343. AMYGDALUS PERSICA. **Peach.**

From Canton, China. Received through Messrs. Lathrop and Fairchild (No. 784, December 20, 1901), February 3, 1902.

Ying tsui t'o, or the Eagle Beak peach, from Fati, near Canton. "These are from different trees than Nos. 8331 to 8334, and may prove to have superior qualities. All that I have seen are seedling trees. Few peaches seem to be grafted." (*Fairchild.*)

8344. PSIDIUM GUAJAVA. **Guava.**

From Canton, China. Received through Messrs. Lathrop and Fairchild (No. 785, December 20, 1901), February 3, 1902.

"A reputed large-fruited (2 inches or so in diameter) yellow guava of good quality. The guavas about Canton are grown in the same fields with the rice. A single patch is often planted to a mixture of peach and guava trees, and both are grown on low ridges about 6 to 8 feet apart each way. No name was obtained." (*Fairchild.*)

8345. PRUNUS sp. **Plum.**

From Canton, China. Received through Messrs. Lathrop and Fairchild (No. 786, December 20, 1901), February 3, 1902.

Tsing mui. "A white-flowered, green-fruited plum. The fruit reaches 1 inch in diameter and is round in shape. This was just beginning to flower on December 20, much earlier than the *Hung Mui* or *Nam wa li* (*li* is pronounced as if spelled 'lay' in this word)." (*Fairchild.*)

8346. FICUS sp. **Milk tree.**

From Canton, China. Presented by Dr. J. M. Swan, of the Canton Hospital, through Messrs. Lathrop and Fairchild (No. 802, December 20, 1901), February 3, 1902.

Nau Nai Shu. "A large entire-leaved species of *Ficus,* which bears, even when quite young, large quantities of figs, at least an inch in diameter and quite sweet. Used as a shade tree in Canton. This was taken from Doctor Swan's yard at the Canton Hospital." (*Fairchild.*)

8347. CITRUS LIMETTA (?) **Lime.**

From Canton, China. Sent by Messrs. Lathrop and Fairchild (No. 803, December 20, 1901), February 3, 1902.

"Orange-fruited lime. Scions taken from some fruit in the market of Canton of a variety of lime about 2 inches in diameter. In color this lime is as dark orange as a blood orange from Malta, and its flesh is not light, as the lime is generally, but a deep orange. It seems like a very sour orange. It is used everywhere here in place of lemon or other kinds of lime. I did not see the trees growing, so can not describe them." (*Fairchild.*) (These scions were not received.)

8348. AMYGDALUS COMMUNIS. **Almond.**

From Malaga, Spain. Received through Mr. D. G. Fairchild (No. 767, July 31, 1901), February 4, 1902.

Jordan. "Bud sticks sent by Francisco Borgos Himenez, of Alhaurin, a village near Cartama, one and one-half hour's ride from Malaga." (*Fairchild.*)

8349. PISTACIA VERA. **Pistache.**

From Aintab, Syria. Received through Rev. A. Fuller.

8350 to 8352. VIOLA ODORATA. **Violet.**

From Paris, France. Received through Vilmorin-Andrieux & Co., February 4, 1902.

A collection of violet seed for experimental work, as follows:

8350.

Perpetual.

8351.

Perpetual, white.

8352.

The Czar.

8353. VIOLA CORNUTA. **Violet.**

From Paris, France. Received through Vilmorin-Andrieux & Co., February 4, 1902.

Blue.

8354. VIGNA CATJANG. **Cowpea.**

From Morioka, Japan. Received through Rev. E. Rothesay Miller, February 4, 1902.

A variety of cowpea having pods 3 feet long. Cooked and eaten like string beans.

8355 to 8357. DOLICHOS LABLAB. **Bean.**

From Morioka, Japan. Received through Rev. E. Rothesay Miller, February 4, 1902.

Edible podded beans as follows:

8355.

Green pods.

8356.

Purplish pods.

8357.

Purple pods.

8358. VICIA FABA. **Broad bean.**

From Canton, China. Received through Messrs. Lathrop and Fairchild (No. 791, December 21, 1901), February 5, 1902.

"A green variety of broad bean found on the market of Canton. This is used for human food, and is grown extensively in Central China, and I have seen large gardens of broad beans near Shanghai." (*Fairchild.*)

8359. ORYZA SATIVA. **Rice.**

From Canton, China. Received through Messrs. Lathrop and Fairchild (No. 788, December 21, 1901), February 5, 1902.

Si Mu. "Rice from Ching Shieng district, Canton province, 20 miles from Canton. It is a low-growing variety. This rice is imported to America for Chinese use, and is very highly prized by the Chinese because of its fine quality and especially because of its fine aroma. The price per katty is 6 cents, while ordinary rice costs about 4. Coolies often smuggle this rice out of the country, because there is an export duty on rice in Canton and this kind is the finest known to the Cantonese." (*Fairchild.*)

8360. ORYZA SATIVA. **Rice.**

From Canton, China. Received through Messrs. Lathrop and Fairchild (No. 790, December 21, 1901), February 5, 1902.

No Mai. "Old man's rice, a variety used for flour and pastry making. It is said to be very tough and nutritious and satisfying. Not generally employed for boiling purposes. It is a very expensive rice, bringing 8 cents a katty. Not classed with the ordinary boiling rices." (*Fairchild.*)

8361. ORYZA SATIVA. **Rice.**

From Canton, China. Received through Messrs. Lathrop and Fairchild (No. 789, December 21, 1901), February 5, 1902.

Wong Chim. "A variety of rice grown in Ching Sien or Ching Shien. I am told this is, next to No. 8359, the finest rice in Canton, but is not exported. It brings only 5 cents a katty when the other brings 6 cents. Vermicelli is said to be made of it." (*Fairchild.*)

8362. CASTANEA sp. **Chestnut.**

From Canton, China. Received through Messrs. Lathrop and Fairchild, February 6, 1902.

8363. PRUNUS ARMENIACA. **Apricot.**

From Canton, China. Received through Messrs. Lathrop and Fairchild (No. 800, December 20, 1901), February 5, 1902.

"Dried apricots from the Canton market. There seem to be no apricots grown about Canton, at least none of the Europeans I have talked with have seen any, and these are probably imported from north China." (*Fairchild.*)

8364. CANARIUM ALBUM. **Chinese olive.**

From Canton, China. Received through Messrs. Lathrop and Fairchild (No. 798, December 20, 1901), February 5, 1902.

Pak Lam. "This is a fruit sold in China by the thousands of tons, both in the dried state and pickled, and stained a light-yellow color. The plant is grown in orchards up the river from Canton and forms a very important article of commerce. Scarcely a fruit stall of any size is without it. The methods of preparation seem to be numerous. Worthy of preliminary plantings in Florida and southern California." (*Fairchild.*)

8365. PRUNUS sp. **Plum.**

From Canton, China. Received through Messrs. Lathrop and Fairchild (No. 799, December 20, 1901), February 5, 1902.

"Dried plums from the market in Canton. The origin of the trees is quite uncertain, but the fruit probably came from somewhere up the West or North rivers. The dealer said they came from Foo Chow, but no reliance is to be put on this statement." (*Fairchild.*)

8366. ELEOCHARIS TUBEROSA. **Water chestnut.**

From Canton, China. Received through Messrs. Lathrop and Fairchild (No. 801, December 20, 1901), February 5, 1902.

"An especially fine variety of the water chestnut, which is imported in large quantities into Canton from Kwai Lam, up the river. It is larger and better than the ordinary sort and should be given a trial in California, where the Chinese already grow the ordinary variety. (See Bulletin No. 68 of the Office of Experiment Stations.) There are numerous uses to which this swamp plant is put. Worthy of consideration as a plant for cultivation in the swamps of the South." (*Fairchild.*)

8367. CITRUS NOBILIS × CITRUS BIGARADIA. **Orange.**

From Mustapha, Algiers, Algeria. Received through Dr. L. Trabut, Government Botanist, January 5, 1902.

Clementine.

8368. CITRUS NOBILIS × CITRUS DECUMANA. **Orange.**

From Mustapha, Algiers, Algeria. Received through Dr. L. Trabut, Government Botanist, January 5, 1902.

8369 to 8385.

From Erfurt, Germany. Received through Haage & Schmidt, February 5, 1902.

A collection of seeds, as follows:

8369. VIOLA MUNBYANA (?).

8370. VIOLA ODORATA BARRENSTEINI.

8371. VIOLA ODORATA BARRENSTEINI, fl. ALBO.

8372. VIOLA ODORATA.

Czar.

8373. VIOLA ODORATA.

Czar fl. albo.

8374. VIOLA ODORATA.

Kaiserin Augusta.

8375. VIOLA ODORATA.

Laucheana.

8376. VIOLA ODORATA.

Reine des Violettes.

8377. VIOLA ODORATA ROSSICA.

8378. VIOLA ODORATA SEMPERFLORENS.

8379. VIOLA ODORATA SEMPERFLORENS fl. ALBO.

8380. VIOLA ODORATA SEMPERFLORENS.

Hamburger treib.

8381. VIOLA ODORATA.

Victoria Reginae.

8382. CAMPANULA MEDIUM.

8383. CODONOPSIS VIRIDIFLORA (?)

8384. DIANTHUS BARBATUS.

8385. DELPHINIUM ZALIL.

8386. THEA VIRIDIS. **Tea.**

From Tokyo, Japan. Received through The Tokyo Plant and Seed Company, February 10, 1902.

Formosa.

8387 to 8409.

From Yokohama, Japan. Received through L. Boehmer & Co., February 3, 1902.

A collection of plants and bulbs, as follows:

8387. LILIUM LONGIFLORUM.

8388. IRIS LAEVIGATA.

8389. IRIS JAPONICA.

8390. IRIS TECTORUM.

Blue.

8391. IRIS TECTORUM.

White.

8392. PAEONIA MOUTAN.

8393. CASTANEA CRENATA.

Japanese mammoth chestnut.

8394. DAPHNE ODORA.

Pink.

8395. DAPHNE ODORA.

White.

8387 to 8409—Continued.

8396. HYDRANGEA HORTENSIS var. AIGAKU.

8397. HYDRANGEA HORTENSIS var. AJISAI.

8398. HYDRANGEA HORTENSIS var. BENJAKU.

8399. HYDRANGEA HORTENSIS.

8400. MAGNOLIA PARVIFLORA ERECTA.

8401. MAGNOLIA PARVIFLORA PENDULA.

8402. MAGNOLIA GRANDIFLORA EXONIENSIS.

8403. CORNUS KOUSA.

8404. CINNAMOMUM LOUREIRII.

8405. RAPHIOLEPIS JAPONICA.

8406. RHUS SUCCEDANEA.

8407. RHUS VERNICIFERA.

8408. ZELKOVA ACUMINATA.

8409. STAUNTONIA HEXAPHYLLA.

8410. CITRULLUS VULGARIS. **Watermelon.**

From Elgin, Utah. Received through Mr. John F. Brown, February 12, 1902.

Winter. A round, white melon, which will keep in perfect condition for several months after maturing. Flesh crimson, very sweet and tender. Seeds small and black. Rind quite tough when fully ripe. The average weight of these melons is about 20 pounds, although specimens weighing 40 pounds have been grown.

8411 to 8413. MANGIFERA INDICA. **Mango.**

From Colombo, Ceylon. Presented by Dr. C. Drieberg, of the Agricultural School, Cinnamon Gardens, Colombo, through Messrs. Lathrop and Fairchild (Nos. 805 to 807), January 13, 1902. Received February 15, 1902.

Scions of three varieties of mangoes, as follows:

8411.

Jaffna. "A long-fruited, medium-sized green mango. The seed is fairly large; flesh golden yellow. It is edible even before fully ripe. A vigorous grower and good bearer. This is the best market mango in Ceylon, and is the one generally planted about the villages. The name would imply its origin in the northern province of Ceylon, but Doctor Willis, of Peradeniya Gardens, says the variety is scarcely known in that province." (*Fairchild.*) (No. 805.)

8412.

Rupee. "The largest fruited variety of mango grown in Ceylon. It is called the Rupee, or two-shilling mango, because of the price paid for a single fruit. Its origin is unknown. It is very large, sometimes 5 inches long, nearly globular, light green in color when ripe. A shy bearer. Skin tender and easily bruised, rendering it a poor shipper. Flesh a golden yellow. Seed small in proportion to the size of the fruit. A rare variety even in Ceylon. The fruits are considered a great delicacy and much sought after by those who know it. Flesh free from stringiness and flavor delicious, but only when properly and perfectly ripened. The tree is not very robust, and Doctor Drieberg does not recommend the variety for general planting." (*Fairchild.*) (No. 806.)

8411 to 8413—Continued.

8413.

Thurston. "These scions are from a single tree (there is only one on the island of Ceylon) growing directly in front of Doctor Drieberg's bungalow, at the agricultural school at Colombo (Cinnamon Gardens). This tree was planted by a Mr. Thurston, and for convenience I have given it his name. It is not a variety known elsewhere on the island. The tree is between 30 and 40 years old and is a very heavy bearer. The fruit is of medium size, short, and somewhat globular. The stone is of medium size and the skin is dark green even when ripe. It ripens well off the tree. It is a vigorous grower, has a sweet flavor, and, according to Doctor Drieberg, is acid when not fully ripe. The flesh is greenish in color near the skin and slightly fibrous." (*Fairchild.*) (No. 807.)

8414. CITRUS NOBILIS × CITRUS DECUMANA. **Orange.**

From Mustapha, Algiers, Algeria. Received through Dr. L. Trabut, Government Botanist, February 15, 1902.

Seeds.

8415. CITRUS AURANTIUM. **Orange.**

From Mustapha, Algiers, Algeria. Received through Dr. L. Trabut, Government Botanist, February 15, 1902.

Merki. A small packet of seeds of a variety of sweet orange.

8416. CERATONIA SILIQUA. **Carob.**

From Candia, Crete. Presented by H. B. M. consul, Walter E. Lanson, of Candia, through Mr. D. G. Fairchild (No. 579), February 17, 1902.

"Cuttings of the best variety of carob, or St. John's bread, for grafting on seedling trees. I am informed that the Candian variety of carob is one of the best in the market, bringing the highest prices. It is a tree which is being more extensively planted every year on the island of Crete, and its pods already form one of the principal exports, both of Crete and Cyprus. It is exported to England, France, and Italy, where it is used for cattle food and for a surrogate to mix with chocolate. According to the inspector of agriculture of Crete, Cavre. G. M. Fumis, this Candian variety has more sugar in it than the other sorts grown in Crete." (*Fairchild.*)

8417. CARICA PAPAYA. **Papaw.**

From Honolulu, Hawaii. Received through Mr. Jared G. Smith, special agent in charge of the agricultural experiment station, February 17, 1902.

Seed grown from No. 5112, Inventory No. 8.

8418. VIGNA CATJANG. **Cowpea.**

From Monetta, S. C. Received through Mr. T. S. Williams, December 5, 1901.

Iron. This variety of cowpea is noted for its remarkable resistance to wilt disease and root-knot.

8419 to 8421. MANGIFERA INDICA. **Mango.**

From Bombay, India. Received through Messrs. Lathrop and Fairchild (Nos. 810 to 812, January 21, 1902), February 24, 1902.

Scions of three varieties of mangoes, as follows:

8419.

Douglas Bennett's Alphonse. "The Bombay mangoes are noted all over the Orient, and they are generally classed as a single sort, but in reality there are numerous varieties. The Alphonse, or, in Hindustani, Alfoos, is considered by connoisseurs as the very finest. These scions are taken from a tree on the estate of Mr. Cooper, near Goregon Station, one hour's ride from Bombay, and

8419 to 8421—Continued.

represent an especially fine strain of the Alphonse mango, which was called to our attention by Mr. Douglas Bennett, superintendent of markets in Bombay, who desires that it be given his name. He says that all he knows of its origin is that over one hundred and thirty years ago it was discovered by a Parsee merchant, and that grafts were put down at Gwalia Tank Road, below Combali Hill, in Bombay, but that now very few of these are to be seen. The supply of this mango is so limited that fancy prices are paid for it, and few Europeans even have ever tasted the fruit. In size it is 3 by 4 by 2 inches and in color a golden yellow when ripe. The flesh is quite without stringiness, stone small, and flavor, according to Mr. Bennett, the best in the world. It is a large-leaved variety and forms a good-sized tree, but is of scraggly growth." (*Fairchild.*) (No. 810.) (See No. 8727.)

8420.

Bottle. "A good market sort, of Bombay. Green in color, ripening to reddish yellow. Flesh is yellowish in color and is not stringy. The fruit is long and slender, hence the name 'Bottle.' The stone is small. The fruit ripens, as do most of the Bombay mangoes, from April to May." (*Fairchild.*) (No. 811.)

8421.

Pirie. "A green, pointed-shaped variety from the Cooper estate at Goregon. Said by the owner, an inspector in the Bombay markets, to be, next to the *Alphonse*, the best of the Bombay mangoes. The seed is larger than that of the *Alphonse* and the flavor is excellent. Has the undesirable quality of being a poor keeper, losing its flavor quickly after fully ripe." (*Fairchild.*) (No. 812.)

8422 to 8424. GLYCINE HISPIDA. **Soy bean.**

From Yokohama, Japan. Received through Dr. S. A. Knapp, February 24, 1902.

8422.

Ita Name. Early.

8423.

Ita Name. Medium.

8424.

Ita Name. Late.

8425. JUGLANS CORDIFORMIS. **Walnut.**

From Yokohama, Japan. Received through Dr. S. A. Knapp, February 24, 1902.

8426. JUGLANS SIEBOLDIANA. **Walnut.**

From Yokohama, Japan. Received through Dr. S. A. Knapp, February 24, 1902.

8427. PHYLLOSTACHYS MITIS. **Bamboo.**

From Yokohama, Japan. Received through Dr. S. A. Knapp, February 24, 1902.

Moso chiku.

8428. PHYLLOSTACHYS QUILIOI. **Bamboo.**

From Yokohama, Japan. Received through Dr. S. A. Knapp, February 24, 1902.

Madake.

8429. JUNCUS EFFUSUS. **Rush.**

From Yokohama, Japan. Received through Dr. S. A. Knapp, February 24, 1902.

8430 to 8433. PUNICA GRANATUM. **Pomegranate.**

From Valetta, Malta. Presented by Baron Testaferrata Abela, through Mr. D. G. Fairchild. Received February 25, 1902.

Cuttings as follows:

8430.

Giuseppe. Prima quality.

8431.

Duc Colon, di S. Caterina.

8432.

Frances.

8433.

S. Rosa.

8434. ELEUSINE CORACANA. **Ragi millet or Kurakkan.**

From Colombo, Ceylon. Received through Messrs. Lathrop and Fairchild (No. 809, January 13, 1902), February 25, 1902.

"A species of millet which is planted all over Ceylon by the Singalese. It is a most important food crop for the natives, although given little attention by Europeans. Watt's Dictionary of Indian Products, 1890, Vol. III, p. 237, gives a long account of the use of this species in India, where it forms one of the great staples. Ferguson describes it as the most prolific of cultivated grasses. One variety, *E. stricta* Roxb., gives an increase of 120 fold, another 500 fold, and a single seed has been calculated to produce no less than 8,100 seeds in a single year. These seeds are very small, however. The food made from this species is coarse, though nourishing. When boiled the flour forms a sticky paste, which must be eaten with greasy gravy to be palatable. There are two varieties in this sample, mixed together, this being the way the field was sown. The two sorts are called *Hanasu Kurakkan*, or *Black Kurakkan*, and *Kiri* (White or Milk) *Kurakkan.* The seed is broadcasted and raked in or trampled in with the feet in May, in Ceylon, and the crop ripens in three months. It seems, however, to be sometimes planted at other times of the year. These varieties are suited only to irrigated lands and for trial in tropical regions with an abundance of rain. This species is a native of Ceylon, but varieties of the same species are cultivated under the native names of *Marua Kaivarii* or *Kelvaragu* in continental India. This whole question of the Indian millets, many of which withstand severe dry weather, Watt says, is worthy of especial attention, and all the best varieties should be secured. Doctor Drieberg, superintendent of School Gardens, Cinnamon Gardens, Colombo, should be applied to for a larger quantity of this seed, which at this season is difficult to secure in good condition. As a chicken food this is reputed to be unsurpassed, fattening poultry with great rapidity. This is grown in a region which has 75 to 100 inches of rainfall a year." (*Fairchild.*)

8435. CITRUS DECUMANA. **Pomelo.**

From Poona, India. Received through Messrs. Lathrop and Fairchild (No. 815, January 26, 1902), February 25, 1902.

"A variety of pomelo which is said to be practically seedless, though not of first quality. It may prove useful for crossing purposes. It is medium large and has a thick skin. The flesh is too dry." (*Fairchild.*)

8436. VITIS VINIFERA. **Grape.**

From Poona, India. Received through Messrs. Lathrop and Fairchild (No. 816, January 27, 1902), February 25, 1902.

Bhokri. "A sweet, white sort, with rather tough skin, but very productive. This is one of the best varieties for general cultivation about Poona, which has a high altitude, tropical climate, temperature as high as 120°, and with 30 inches of rainfall. It is said to have originated in the north of India. It bears two crops a year, only the second one, however, being sweet." (*Fairchild.*)

8437. JASMINUM SAMBAC. **Arabian jasmine.**

From Poona, India. Received through Messrs. Lathrop and Fairchild (No. 817, January 25, 1902), February 25, 1902.

"A variety of jessamine much cultivated by the natives of India and used by them in their worship under the name of *Mogaree.* It is a vigorous growing shrub and bears an abundance of very large, double, white flowers, which are highly perfumed. Some of these flowers are said to be as large as a camelia blossom. The plant requires rich soil and is very sensitive to cold. It is strictly a tropical plant, although doing well in gardens in Cairo. The cuttings should be treated in the usual way, i. e., rooted in moist sand, and the plants can be set out in a rich border. This is the largest variety of the jessamine I know, and if not already introduced into Hawaii, southern California, or Florida, deserves to be generally propagated and distributed. From the Empress Gardens, in Poona, India." (*Fairchild.*)

8438. POINSETTIA PULCHERRIMA. **Poinsettia.**

From Poona, India. Received through Messrs. Lathrop and Fairchild (No. 818, January 25, 1902), February 25, 1902.

"A double poinsettia of rare beauty. Instead of the usual whorl of bright red leaves characteristic of the ordinary poinsettia this sort has from three to five such whorls. These are at their best when the green leaves have fallen and the light gray stems are quite bare. As a decorative plant for giving a splash of the brightest red to a landscape this plant is unequalled." (*Fairchild.*)

8439. CITRUS AURANTIUM. **Orange.**

From Poona, India. Received through Messrs. Lathrop and Fairchild (No. 819, January 26, 1902), February 25, 1902.

Kowla. "Described by Woodrow in his 'Gardening in India,' page 193, as an indifferent dessert fruit, but considered by the natives of India as well worth attention and, in fact, recommended as a good sort. A distinct variety, and hence worthy of a collection." (*Fairchild.*)

8440. MANGIFERA INDICA. **Mango.**

From Poona, India. Received through Messrs. Lathrop and Fairchild (No. 820, January 26, 1902), February 25, 1902.

Alphonse or *Aphoos.* "From a tree in the Empress Gardens at Poona. It may prove a different strain from Nos. 8419 and 8727. This is the best Bombay mango and is remarkable for its good shipping qualities. It can be picked when still green, laid or shipped in straw with plenty of air, and kept for six weeks. Even after ripe, fruits can be kept for a week or more. A much better shipper than the *Mulgoba* and more productive." (*Fairchild.*)

8441. CITRUS AURANTIUM. **Orange.**

From Poona, India. Received through Messrs. Lathrop and Fairchild (No. 821, January 26, 1902), February 25, 1902.

Ladoo. "This is a popular orange in India and is of the mandarin class, although not so fine looking in appearance. The oil glands are finer and the color is a duller orange, sometimes russet. It deserves a place in every collection of oranges as a distinct type. Woodrow, in his 'Gardening in India,' page 209, figures this variety and recommends it for planting. It is a loose-skinned sort but the skin is more nearly filled by the flesh than the ordinary mandarin and in texture it is unusually crisp and of good flavor. Very little fiber is one of its characteristics. In size it is about the average of the mardarin type. Secured by the superintendent of the Empress Gardens in Poona." (*Fairchild.*)

8442. MANGIFERA INDICA. **Mango.**

From Poona, India. Received through Messrs. Lathrop and Fairchild (No. 822, January 26, 1902), February 25, 1902.

Borsha. "See Woodrow, Gardening in India, page 248. Fruit weighs on an average 10 ounces. Ripens by the first of July. Flesh is as dry as that of *Mulgoba* or *Alphonse* and can be cut like cheese. It is three to four weeks later in ripening than the *Alphonse* and is considered almost its equal in quality. One large tree of this variety is said to have often yielded over $150 worth of fruit in a single crop. It should be planted in alluvial soil and given plenty of bone ash. The banks of a river or irrigation canal are especially well suited to mango culture. This variety is distinguished from the *Mulgoba* by its young shoots, which are distinctly reddish in color. Mangoes are sometimes shipped from Bombay to London, which is eighteen days' or more of sea travel." (*Fairchild.*)

8443. CITRUS sp.

From Poona, India. Received through Messrs. Lathrop and Fairchild (No. 823, January 26, 1902), February 25, 1902.

Jamburee or *Jamboorec.* "A variety of *Citrus* which is used in India extensively for stocks on which the orange is grafted. Considerable discussion regarding its influence on the scions of sweet oranges will be found in Woodrow's 'Gardening in India,' pages 214 and 215. In one place Woodrow calls this a lime, in another a citron." (*Fairchild.*)

8444. MANGIFERA INDICA. **Mango.**

From Poona, India. Received through Messrs. Lathrop and Fairchild (No. 824, January 26, 1902), February 25, 1902.

Pakria. "Described at some length by Woodrow, page 247, in his Gardening in India, and considered by some as one of the three best mangoes in the Bombay presidency; at any rate it is a sort in big demand for planting. It ripens three or four weeks later than the *Alphonse*—i. e., from the end of May to the end of June. Secured through the kindness of Mr. Kannetkar, superintendent of Empress Gardens in Poona. (*Fairchild.*)

8445. THYSANOLAENA AGROSTIS.

From Poona, India. Received through Messrs. Lathrop and Fairchild (No. 825, January 26, 1902), February 25, 1902.

"Two pieces of rhizome of an ornamental cane from the Himalayas. It flowers profusely and remains in flower for four months. The inflorescences are steel-gray and great masses of them are produced. The plant grows to a height of 8 to 10 feet and forms large clumps like pampas grass or like some species of *Arundo.* It is altogether the handsomest cane for borders that I have ever seen. It deserves a wide distribution in Hawaii and southern California. As seeds were not procurable the experiment of sending two rhizomes in a perforated tin case by sample post has been attempted. If successful more can be had of the superintendent of the Empress Gardens in Poona. Seed may be had of the Calcutta Botanic Gardens. The plant requires good rich soil and plenty of moisture. In the Poona Gardens it is grown on irrigated land because there are only about 25 inches of yearly rainfall. The cuttings should be given such treatment as would be given the ordinary ornamental canes." (*Fairchild.*)

8446. CITRUS AURANTIUM. **Orange.**

From Poona, India. Received through Messrs. Lathrop and Fairchild (No. 826, January 26, 1902), February 25, 1902.

Cintra or *Suntara.* "Woodrow (Gardening in India, p. 210), says this is the finest orange in India. It weighs from 7 to 10 ounces. One sort has loose skin, the other tightly fits the pulp. It has very few seeds, and is often quite seedless. The flesh is unusually crisp and has almost no fiber, but is somewhat lacking in sweetness. The oil glands are very small and close together in the skin. The color is not so bright as that of the mandarin of Japan. This variety is of especial interest only because of its reported seedlessness and the fiberless nature of the flesh, which is quite remarkable. I am assured this is the tight-skinned variety, which is superior to the loose-skinned one. The type is distinctly a mandarin one. Through the kindness of Superintendent Kannetkar of the Empress Gardens, Poona." (*Fairchild.*)

8447. CITRULLUS VULGARIS. **Watermelon.**

From the Agricultural Experiment Station, Pomona, Cal. Received February 20, 1902.

Khama or *Tsamma.* This melon is very valuable for stock feeding in dry countries, as it thrives with very little water. (Grown from No. 4322.)

8448 to 8453. PYRUS MALUS. **Apple.**

From Misserghin, near Oran, Algeria. Received through Messrs. D. G. Fairchild and C. S. Scofield, from the Nursery of the Orphelinat de l'Annonciation, February 26, 1902.

8448 to 8453—Continued.

Apple trees and scions as follows:

8448.

Algerienne.

8449.

D'Eve.

8450.

De Chataignier.

8451.

Nain Paradis.

8452.

Precoçe de Tunis.

8453.

Nain de Mahon.

8454 and 8455. CYDONIA VULGARIS. **Quince**

From Misserghin, near Oran, Algeria. Received through Messrs. D. G. Fairchild and C. S. Scofield from the Nursery of the Orphelinat de l'Annonciation, February 26, 1902.

Quince scions as follows:

8454.

De Laghouat.

8455.

De Mahon.

8456 to 8460.

From San Giovanni á Teduccio, Italy. Received through Dammann & Co., March 3, 1902.

8456. VIOLA CORNUTA.

8457. VIOLA CORNUTA ALBA.

8458. VIOLA CORNUTA.

Admiracion.

8459. VIOLA CORNUTA.

Blue Perfection.

8460. VIOLA ODORATA SEMPERFLORENS.

8461. LATHYRUS sp.

From the Vomero, Naples, Italy. Received through Dr. C. Sprenger, March 5, 1902.

"A native of Mexico." (*Sprenger.*)

8462. VITIS VINIFERA. **Grape.**

From Kurrachee, India. Received through Messrs. Lathrop and Fairchild (No. 827, February 2, 1902), March 10, 1902.

Sufetha. "An indigenous white grape, grown successfully at Kurrachee. It is one of the three best in cultivation here, where there is only 7 inches of rainfall and the temperature in summer goes to 110° F. from March to the end of June, and the soil is noticeably alkaline. Berry large and round; bunches 4½ pounds in weight; long, crowded, heavy cropper; flavor good; skin thick and leathery. It is said to be a good keeper and shipper, being shipped from Kurrachee to Bombay and Lahore. These cuttings are from the Kurrachee Public Gardens." (*Fairchild.*)

8463. VITIS VINIFERA. **Grape.**

From Kurrachee, India. Received through Messrs. Lathrop and Fairchild (No. 829, February 2, 1902), March 10, 1902.

Goolabie. "An indigenous variety of grape which thrives better than such forms as the *Black Hamburg*, and, according to our informant, Mr. Lester, superintendent of the public gardens of Kurrachee, it is considered superior in flavor to the *Black Hamburg.* This is the favorite grape for Kurrachee conditions, which resemble those of Tulare (California) and Arizona, being a desert where only 7 inches of rain falls and where, for the summer months, a temperature of 110° is of daily occurrence. The soil is decidedly alkaline, in fact too much so for ordinary European grapes. The variety is said to be a purple, small-berried kind, a very heavy cropper, fruiting the end of April. The bunches weigh 1½ to 2 pounds. The berry has a very thin skin and two or three seeds. The name means 'rose flavored' and the flavor is that of rose petals. It was introduced into Poona, India, but did not succeed there." (*Fairchild.*)

8464. VITIS VINIFERA. **Grape.**

From Kurrachee, India. Received through Messrs. Lathrop and Fairchild (No. 828, February 2, 1902), March 10, 1902.

Kandhari. "A long-berried, thin-skinned, white grape with very large bunches, 3 to 4 pounds in weight. It is a vigorous grower, but light bearer. An indigenous sort, of fine flavor, suited to an arid climate, and alkaline soil in a very warm climate." (*Fairchild.*)

8465 to 8475. CITRULLUS VULGARIS. **Watermelon.**

From Monetta, S. C. Received through Mr. T. S. Williams, November 5, 1901.

Seeds from hand-pollinated melons, grown from seeds imported by the Office of Seed and Plant Introduction:

8465. From No. 16.

Melon of average size with dark-green stripes. Flesh orange-colored and of very fine flavor. Vine small and not vigorous. This is an excellent melon for home use.

8466. From No. 35.

A small green melon with white spots. The flesh is deep red and very fine. The vine is small, but strong.

8467. From No. 68, which is evidently mixed seed.

A large, pale-green melon with broad, dark stripes. The flesh is orange-colored and of very fine flavor. The vine is very vigorous.

8468. From No. 68.

A medium-sized, pale-green melon with broad, dark-green stripes. The flesh is orange colored and of good flavor. The vine is very vigorous.

8469. From No. 46.

A large, light-gray melon. The flesh is deep red and of fine flavor. The vine is very vigorous.

8470. From No. 93.

A rather large, gray melon, with green stripes. The flesh is pink and of very fine flavor. The vine is vigorous.

8471. From No. 2847.

A fairly good, green melon of average size. The flesh is pale red and of good flavor. The vine is strong.

8472. From No. 2847.

A medium-sized, mottled-green melon. The flesh is red and of good flavor. The vine is strong.

8473. From No. 2848.

A large, white melon. The flesh is deep red, of fine texture and very fine flavor.

8474. From No. 2849.

A medium-sized, dark-green melon, with small white stripes. The flesh is deep red, of fine texture and delicious flavor.

8475. From No. 6151.

A very large, dark-green, striped melon. The flesh is pink, of rather coarse texture, but fine flavor.

8476. PISTACIA MUTICA. **Menengech.**

From Aintab, Syria. Presented by Rev. A. Fuller, through Mr. W. T. Swingle. Received March 10, 1902.

8477 and 8478. PISTACIA VERA. **Pistache.**

From Aintab, Syria. Presented by Rev. A. Fuller, through Mr. W. T. Swingle. Received March 10, 1902.

8477.

Large red.

8478.

Large green.

8479 to 8482. PISTACIA VERA. **Pistache.**

From Aintab, Syria. Presented by Rev. A. Fuller, through Mr. W. T. Swingle. Received March 10, 1902.

8479.

Selected mixed fresh pistache nuts from the market.

8480.

Aleppo red. Very large and fine.

8481.

A large, unnamed, green variety.

8482.

Koz. Known as the "Walnut" pistache.

8483. PISTACIA VERA × (?) **Butum.**

From Aintab, Syria. Presented by Rev. A. Fuller, through Mr. W. T. Swingle. Received March 10, 1902.

Fresh, selected "Butum" nuts.

8484. PISTACIA MUTICA. **Menengech.**

From Aintab, Syria. Presented by Rev. A. Fuller, through Mr. W. T. Swingle. Received March 10, 1902.

Selected fresh seeds.

8485. PISTACIA MUTICA. **Menengech.**

From Aintab, Syria. Presented by Rev. A. Fuller, through Mr. W. T. Swingle. Received March 10, 1902.

Ordinary seeds from the market.

8486 to 8501.

From Washington, D. C. Received March 10, 1902.

A collection of seeds grown on the Potomac Flats by Mr. W. R. Beattie from seeds furnished by the Office of Seed and Plant Introduction.

8486. PHASEOLUS MUNGO. Grown from No. 6321.

8487. PHASEOLUS MUNGO. Grown from No. 6417.

8488. PHASEOLUS MUNGO. Grown from No. 6318.

8489. GLYCINE HISPIDA. Grown from No. 6314.

8490. GLYCINE HISPIDA. Grown from No. 6333.

8491. GLYCINE HISPIDA. Grown from No. 6334.

8486 to 8501—Continued.

8492. GLYCINE HISPIDA. Grown from No. 6386.

8493. GLYCINE HISPIDA. Grown from No. 6396.

8494. GLYCINE HISPIDA. Grown from No. 6336.

8495. GLYCINE HISPIDA. Grown from No. 6397.

8496. GLYCINE HISPIDA. Grown from No. 6416.

8497. GLYCINE HISPIDA. Grown from No. 6312.

8498. VIGNA CATJANG. Grown from No. 6311.

8499. VIGNA CATJANG. Grown from No. 6327.

8500. VIGNA CATJANG. Grown from No. 6328.

8501. VIGNA CATJANG. Grown from No. 6413.

8502. MAGNOLIA KOBUS. **Magnolia.**

From Yokohama, Japan. Received through L. Boehmer & Co., March 13, 1902.

8503. PAEONIA MOUTAN. **Tree peony.**

From Yokohama, Japan. Received through L. Boehmer & Co., March 13, 1902.

8504. ZAMIA FLORIDANA. **Coontie.**

From Miami, Fla. Received through Prof. P. H. Rolfs, in charge of the Subtropical Laboratory of the United States Department of Agriculture.

8505. THEA VIRIDIS. **Tea.**

From Heneratgoda, Ceylon. Presented by Messrs. J. P. William & Bros. Received March 17, 1902.

Formosa.

8506 and 8507. FICUS CARICA. **Fig.**

From the island of Chios, Turkey. Presented by Mr. N. J. Pantelides, through Mr. D. G. Fairchild. Received March 19, 1902.

Fig cuttings as follows:

8506.

Figue de Chios. "Very fine when fresh." (*Pantelides.*)

8507.

Figue de Syria. Lombardica. "A very fine, large variety, blackish on the outside and bright red inside." (*Pantelides.*)

8508 to 8515. ORYZA SATIVA. **Rice.**

From Japan. Received through Dr. S. A. Knapp, March 19, 1902.

Seed rice as follows:

8508.

Fusakichi. From Bizen district. (I)

8509.

Mansaku bozu. From Fukuoka district. (J)

8510.

From Ise district. (K)

8511.

From Buzen district. (L)

8512.

From Iyo district. (M)

8513.

From Higo district. (N)

8514.

From Bizen district. (O)

8515.

From Banshu (?) district. (P)

8516. CANNABIS SATIVA. **Hemp.**

From Danville, Ky. Received through Mr. George Cogar, March 20, 1902.

8517 to 8520. PISTACIA VERA. **Pistache.**

From Marseille, France. Received through Mr. Claude Montel, March 21, 1902.

8517. Grafted female pistache trees.

8518. Grafted male pistache trees.

8519. Female pistache scions.

8520. Male pistache scions.

8521. PISTACIA TEREBINTHUS. **Terebinth.**

From Marseille, France. Received through Mr. Claude Montel, March 21, 1902.

Terebinth stocks for grafting.

8522 and 8523. TRITICUM DURUM. **Wheat.**

From Brookings, S. Dak. Seed grown in 1901 under contract by Prof. J. H. Shepard, of the South Dakota Agricultural Experiment Station.

8522.

Kubanka. Grown from No. 5639.

8523.

Velvet Don. Grown from No. 5644.

8524 to 8529.

From Paris, France. Received from Vilmorin-Andrieux & Co., March 27, 1902.

8524. LINUM USITATISSIMUM. **Flax.**

Original *Riga.*

8525. CANNABIS SATIVA. **Hemp.**

Russian.

8526. THYMUS VULGARIS. **Thyme.**

8527. THYMUS SERPYLLUM. **Creeping thyme.**

8528. LAVANDULA VERA. **Lavender.**

8529. LAVANDULA SPICA. **Spike lavender.**

8530 to 8537.

Received from J. M. Thorburn & Co., of New York City, March 29, 1902. A collection of foreign-grown seeds of medicinal plants, for use in experimental work under the direction of Dr. R. H. True, of the Department of Agriculture.

8530. ATROPA BELLADONNA. **Belladonna.**

8531. ARNICA MONTANA. **Mountain tobacco, or mountain snuff.**

8532. DIGITALIS PURPUREA. **Foxglove.**

8533. GLYCYRRHIZA GLABRA. **Licorice.**

8534. DATURA STRAMONIUM. **Thorn apple.**

8535. HYOSCYAMUS NIGER. **Henbane.**

8536. PAPAVER SOMNIFERUM. **Poppy.**

8537. ACONITUM NAPELLUS. **Aconite.**

8538. AVENA SATIVA. **Oat.**

From Bozeman, Mont. Presented by the Director of the Agricultural Experiment Station. Received April 1, 1902.

Swedish Select. Grown from No. 2788.

8539 to 8542.

From Poona, India. Received through Dr. S. A. Knapp, April 1, 1902.

8539. PHASEOLUS ACONITIFOLIUS.

Math. "This legume is grown in the Deccan and the Gujarat as a 'kharif,' or rain crop, sown only in the rainy season. It does well on light, stony, upland soil, with an average annual rainfall of 30 inches. The usual method is to sow a mixture of 8 pounds of *Bajri* (*Pennisetum typhoideum*) and 1½ pounds of *Math* per acre in July, the crop being harvested in November or December." (*Knapp.*)

8540. PHASEOLUS MUNGO.

Mug. "This plant is largely grown as a 'kharif,' or rain crop, and also as a 'rabi' (cold-weather crop) in many parts of India. As a 'kharif' crop it is mixed with sorghum (*Jowari*), while as a 'rabi' crop it is sown after rice has been harvested. It does best in a deep, black soil, with an average rainfall of from 30 to 35 inches. It ripens in three months after sowing." (*Knapp.*)

8541. PHASEOLUS RADIATUS.

Udid. "This bean is largely cultivated in India as a subordinate crop with sorghum (*Jowari*), the usual amount sown being 6 pounds of *Jowari* and 3 pounds of *Udid.* It does best if sown in June in deep, black soil, with a rainfall of from 30 to 35 inches, being harvested in September. *Udid* is also grown in some sections as a second crop after rice." (*Knapp.*)

8542. DOLICHOS UNIFLORUS.

Kulthi. "This plant is largely grown on light soils of a strong or sandy nature, and thrives with a moderate rainfall. It is usually sown with bulrush millet (*Pennisetum typhoideum*), the rate per acre being 8 pounds of millet to 2 pounds of *Kulthi.*" (*Knapp.*)

8543 to 8547.

From Nagpur, India. Received through Dr. S. A. Knapp, April 1, 1902.

8543. ORYZA SATIVA. **Rice.**

Dhan. A quick-ripening variety.

8544. TRITICUM DURUM. **Wheat.**

Haura Gahoo.

8545. DOLICHOS LABLAB. **Lablab bean.**

Tal, *Val*, or *Popat.*

8546. ANDROPOGON SORGHUM. **Sorghum.**

A late variety used for forage.

8547. ANDROPOGON SORGHUM. **Sorghum.**

Used for forage.

8548 to 8552.

From Lahore, India. Received through Dr. S. A. Knapp, April 1, 1902.

A collection of wheats as follows:

8548. TRITICUM VULGARE.

Pure red wheat, grown without irrigation on land near the river. (No. 1.)

8548 to 8552—Continued.

8549. TRITICUM VULGARE.

Pure white wheat, grown on slightly salty land irrigated with canal water. (No. 2.)

8550. TRITICUM DURUM.

Round red wheat, grown on slightly salty land irrigated with canal water. (No. 3.)

8551. TRITICUM DURUM.

Round white wheat, grown on strong black soil irrigated with canal water. (No. 4.)

8552. TRITICUM DURUM.

Wadanak. Grown on light, slightly sandy soil irrigated with well water.

8553 to 8562.

From Christiania, Norway. Presented by Prof. C. Doxrud, of the Christiania School of Technology, for testing in comparison with seeds from other countries. Received April 2, 1902.

8553. PHLEUM PRATENSE. **Timothy.**

8554. DACTYLIS GLOMERATA. **Orchard grass.**

8555. TRIFOLIUM PRATENSE. **Red clover.**

8556. TRIFOLIUM HYBRIDUM. **Alsike clover.**

8557. PISUM SATIVUM. **Pea.**

Early.

8558. AVENA SATIVA. **Oat.**

8559. HORDEUM HEXASTICHUM. **Barley.**

8560. HORDEUM DISTICHUM. **Barley.**

8561. TRITICUM VULGARE. **Wheat.**

Red spring.

8562. PISUM SATIVUM. **Pea.**

Sueding.

8563 and 8564. PHOENIX DACTYLIFERA. **Date.**

From Kurrachee, India. Received through Messrs. Lathrop and Fairchild (No. 830, February 1, 1902), April 4, 1902.

Cupcap, Chupchap, or *Cupcup.* "This is a variety of the *Karak pokhta,* or cooked dates, and is considered one of the best of its class. These cooked dates are prepared in the following way: The fruits are picked before fully ripe, while still full, plump, and slightly astringent. They are boiled for an hour in fresh water, to which one handful of salt per gallon of water is added. After boiling they are spread out in the sun to dry. These boiled dates are sold in large quantities in India. They form an indispensable part of every marriage feast. Higher prices are paid for them in India, I am informed, than for the dates shipped to America. This sort is, when properly prepared, quite sweet, in fact, tastes quite as if candied. The slight flavor of tannin may be due to careless preparation. It is a fairly early date, coming into fruit about Maskat in July. It is also a good date to eat fresh. It keeps almost indefinitely. There are several qualities of this variety. That marked *a* came from Kurrachee, while *b* was secured in Maskat." (*Fairchild.*)

8565. CAPSICUM ANNUUM. **Red pepper.**

From Kurrachee, India. Received through Messrs. Lathrop and Fairchild (no number), April 4, 1902.

Bird's bill.

8566. CAPSICUM ANNUUM. **Red pepper.**

From Kurrachee, India. Received through Messrs. Lathrop and Fairchild (No. 828, February 6, 1902), April 4, 1902.

"The common red pepper in use in Kurrachee. It is mild in comparison with the Maskat variety. It is dark wine-red in color, and long and conical in shape. Bought in a Maskat market." (*Fairchild.*)

8567. PHOENIX DACTYLIFERA. **Date palm.**

From Kurrachee, India. Received through Messrs. Lathrop and Fairchild (no number), April 4, 1902.

"*Bagist* or *Dairi* dates, a second-class variety eaten by the common people." (*Fairchild.*)

8568. CAPSICUM ANNUUM. **Chili pepper.**

From Maskat, India. Received through Messrs. Lathrop and Fairchild (No. 837, February 6, 1902), April 4, 1902.

"A very hot orange or light-red variety of red pepper, reputed to be one of the hottest peppers on the Persian Gulf. Bought in a Maskat bazaar." (*Fairchild.*)

8569. PHOENIX DACTYLIFERA. **Date palm.**

From Maskat, India. Received through Messrs. Lathrop and Fairchild (No. 831, February 6, 1902), April 4, 1902.

Burni. "Dried dates of one of the *Karak pokhta* or cooking class. This date is also said to be a first-class drying or pressed date, but with poor keeping qualities. It is so delicate that it can not be sent successfully to America, but it is considered superior in flavor to the *Fard* date, which is the variety commonly shipped to America. It is the earliest date known at Maskat, and one of the very finest flavored sorts. It ripens in Maskat in June, but this region of Maskat has a temperature in summer of 110° and even 117° F. in the shade, so that the sort might ripen later if transplanted to a region with a cooler summer temperature. The dates sent are of the boiled sort only, the dried kind being quite unobtainable." (*Fairchild.*)

8570. PHOENIX DACTYLIFERA. **Date palm.**

From Kurrachee, India. Received through Messrs. Lathrop and Fairchild (No. 834, Feb. 2, 1902), April 4, 1902.

Jahadi. "Dried dates of one of the second quality sorts shipped into India from the Persian Gulf. This variety is probably shipped to America." (*Fairchild.*)

8571. PHOENIX DACTYLIFERA. **Date palm.**

From Maskat, India. Received through Messrs. Lathrop and Fairchild (No. 833, February 6, 1902), April 4, 1902.

Khanezi. "Dried dates of a first-class Persian Gulf sort sent largely to America. This is considered inferior to the *Fard*, but still ranks as a very good sort." (*Fairchild.*)

8572. PHOENIX DACTYLIFERA. **Date palm.**

From Kurrachee, India. Received through Messrs. Lathrop and Fairchild (No. 832, February 5, 1902), April 4, 1902.

Fard. "Dried dates of the variety most commonly shipped from the Persian Gulf to America. This is not considered the finest of the dates, but is one of the best shippers. It is a dark, medium-sized sort, of good quality. It is grown about Maskat and the southern part of the Persian Gulf. It is a medium early date, later than *Burni.*" (*Fairchild.*)

8573. PHOENIX DACTYLIFERA. **Date palm.**

From Bahrein, Arabia. Received through Messrs. Lathrop and Fairchild (No. 835, February 10, 1902), April 4, 1902.

Khalasa. "Dried dates of one of the finest varieties in the Persian Gulf. These dates are so delicate that they are not shipped to America, although they may be kept several months, as is evidenced by the present samples. They are reported to suffer by the sea voyage. The date has very little fiber, being a sticky sort with a decidedly caramel-like texture. The flavor is superior to that of the best *Fard* date and the skin is soft and delicate. The stone is small, but not unusually so. It is considered the best date on the Persian Gulf by Mr. J. C. Gaskin, British consul, who has been a dealer in one of the largest date firms at Bassorah, and by Mr. S. M. Zwemer, who has traveled all over Arabia. Personally I prefer the *Pangh Ghur* date and the *Deglet Noor*, but the *Khalasa* approaches these closely for sweetness and delicacy. It is sticky, however, and might not be well suited to such style of packing as is in vogue with the French packers in Algiers. Secured through the kindness of Messrs. Gaskin and Zwemer, of Bahrein." (*Fairchild.*) (See No. 8753.)

8574. PISTACIA VERA. **Pistache.**

From Bunder Abbas, Persia. Received through Messrs. Lathrop and Fairchild (No. 839, February 11, 1902), April 4, 1902.

"Bought in the market of Bunder Abbas. They were said to have been brought down some nineteen days by caravan from the town of Kerman, in the interior. They were fresh in December or November. The trees were probably grafted, although no definite information on this point could be obtained. Kerman is said to have a temperate climate." (*Fairchild.*)

8575. LAGENARIA sp. **Gourd.**

From Jask, Persia. Received through Messrs. Lathrop and Fairchild (No. 840, February 11, 1902), April 4, 1902.

"A white, edible gourd growing to a large size, 1½ feet long by 8 inches in diameter. It forms a pretty trellis plant in Jask, where the temperature rises to 110° F. and no rain falls. It is grown by irrigation. It may prove of value in the Colorado desert region. It is prepared by boiling in salt water like any of the squash family. The leaves are large and the flowers are white with long tubes to the corolla." (*Fairchild.*)

8576. VITIS CANDICANS. **Mustang grape.**

From Tiger Mill, Texas. Presented by Mr. H. T. Fuchs to Hon. A. S. Burleson and by him to this Department. Received April 7, 1902.

Seeds of the finest wild grapes of Texas, according to Mr. Fuchs' letter.

8577. CARICA PAPAYA. **Papaw.**

From Mexico. Presented by Mr. Elmer Stearns, 3226 Manitou avenue, Los Angeles, Cal. Received March 29, 1902.

"These seeds were from a fruit 6 inches long by 3½ inches in diameter, grown in the hot country southwest of Guadalajara." (*Stearns.*)

8578. OPUNTIA sp. **Prickly pear.**

From Guadalajara, Mexico. Presented by Mr. Elmer Stearns, 3226 Manitou avenue, Los Angeles, Cal. Received March 29, 1902.

Tuna colorado. "These seeds were from a fruit 2 inches by 1½ inches in diameter." (*Stearns.*)

8579. OPUNTIA sp. **Prickly pear.**

From City of Mexico, Mexico. Presented by Mr. Elmer Stearns, 3226 Manitou avenue, Los Angeles, Cal. Received March 29, 1902.

Tuna amarilla.

8580. CEREUS sp. **Pitahaya.**

From Mexico. Presented by Mr. Elmer Stearns, 3226 Manitou avenue, Los Angeles, Cal. Received March 29, 1902.

"These seeds were from a fruit weighing 1 pound, grown in the foothills 75 miles west of Tampico, Mexico." (*Stearns.*)

8581 to 8583. VITIS VINIFERA. **Grape.**

From Aintab, Syria. Received through Rev. A. Fuller, April 15, 1902.

Grape cuttings as follows:

8581.

Aintab Summer (Nabodada). "A large, oblong, white grape. The flesh is rather coarse, but it is much prized for table use." (*Fuller.*)

8582.

Aintab Autumn (Kabbajuk). "A medium-sized, round, white grape, much prized for table use. It ripens in July and August." (*Fuller.*)

8583.

Aintab Winter (Hunisa). "A large, wine-colored, oblong grape. It ripens in October and November and keeps until March." (*Fuller.*)

8584 to 8589.

From Chin-kiang, China. Received through Dr. S. A. Knapp from Rev. Dr. S. P. Barchet, Shanghai, China, April 15, 1902.

8584. GLYCINE HISPIDA. **Soy bean.**

"A very prolific, nearly white variety, used for making oil and also for food. It is sometimes ground into flour and used for making cakes." (*Knapp.*)

8585. PHASEOLUS sp. **Bean.**

"Used for food and for making starch. It grows well on sandy soil." (*Knapp.*)

8586. GLYCINE HISPIDA. **Soy bean.**

"A very oily variety, used chiefly for fattening purposes. Planted in July or August." (*Knapp.*)

8587. VICIA FABA. **Broad bean.**

"A large, rank-growing variety that will stand frost. It is planted in November." (*Knapp.*)

8588. PISUM sp. **Pea.**

"A rank-growing variety used for food. It is planted in November." (*Knapp.*)

8589. TRITICUM VULGARE. **Wheat.**

"A hardy, rust-proof variety. Sown in October or November. (*Knapp.*)

8590 to 8592.

From Shanghai, China. Received through Dr. S. A. Knapp from Rev. Dr. S. P. Barchet, April 15, 1902.

8590. ORYZA SATIVA. **Rice.**

"An early variety. It is sown late in May or early in June." (*Knapp.*)

8590 to 8592—Continued.

8591. ORYZA SATIVA. **Rice.**

"A late variety. It is sown late in June or early in July." (*Knapp.*)

8592. VICIA FABA. **Broad bean.**

"Quite similar to No. 8587, but not so large." (*Knapp.*)

8593 and 8594. ORYZA SATIVA. **Rice.**

From Kiang-si Province, China. Received through Dr. S. A. Knapp from Rev. Dr. D. W. Nichols, Nan-chang, China, April 15, 1902.

8593.

Wan Ku (late rice). "A beautiful white grain, quite flaky when cooked." (*Nichols.*)

8594.

Tsoa Ku (early rice). "A crop of this and the preceding variety can be grown on the same ground the same year." (*Nichols.*)

8595. THEA VIRIDIS. **Tea.**

From Calcutta, India. Received from the Pashok Tea Company (Limited), Kilburn & Co., agents, April 15, 1902.

Pashok Darjeeling.

8596. VICIA FABA. **Broad bean.**

From Sheridan, Mont. Presented by Mr. S. M. Wilson, April 15, 1902.

These beans are said by Mr. Wilson to come from northern Sweden, and to endure a degree of cold that kills other tender vegetation.

8597 and 8598.

From Erfurt, Germany. Received through Haage & Schmidt, seedsmen, April 19, 1902.

8597. CARYOTA URENS. **Wine or toddy palm.**

8598. RAVENALA MADAGASCARIENSIS. **Travelers' tree.**

8599. PUNICA GRANATUM. **Pomegranate.**

From Bagdad, Arabia. Received through Messrs. Lathrop and Fairchild (No. 883, March 8, 1902), April 21, 1902.

Achmar or *Red.* "This variety bears fruit of a very large size. I have seen a specimen over 2 pounds in weight. The skin is thin, but there are many thick walls dividing the segments. The seeds are large, each with a deep, very juicy, wine-red arillus. Remarkable for its size and red color." (*Fairchild.*)

8600. ZIZYPHUS JUJUBA. **Jujube.**

From Bagdad, Arabia. Received through Messrs. Lathrop and Fairchild (No. 887, March 8, 1902), April 21, 1902.

Nebuk or *Nabug ajam.* "A Persian variety, called the red jujube. A variety larger than the *Bagdad*, but not of as good flavor. These jujube trees, as they are grown in Mesopotamia, are the most picturesque, in fact the only conspicuous shade trees in the region, and are worthy of trial along irrigation canals. They bear enormous crops of small fruits, about the size of cherries, which are greedily sought after by the children. The fruits taste much like baked apples. There is a variety in which the seed, instead of being hard, like a date stone, is thin shelled, and one can eat it easily." (*Fairchild.*) (See No. 8702.)

8601. Citrus limonum. **Lemon.**

From Bagdad, Arabia. Received through Messrs. Lathrop and Fairchild (No. 889, March 8, 1902), April 21, 1902.

Hameth. "A Bagdad variety which is of most excellent quality and characterized by a dark orange 'blush' at the stem end, making it a peculiar and showy fruit. The skin is very thin, and the fruit very juicy and of medium size. The shape of those I saw was almost that of an egg." (*Fairchild.*)

8602. Citrus aurantium. **Orange.**

From Bagdad, Arabia. Received through Messrs. Lathrop and Fairchild (No. 890, March 8, 1902), April 21, 1902.

Portugal Asfar. "A common Bagdad orange which is in all respects, except the presence of seeds, a remarkably fine orange. It does well in the alluvial adobe soil of Bagdad, and even where there is some alkali in the soil. These scions came from the garden of Abdul Kader Kederry, at Bagdad." (*Fairchild.*)

8603. Citrus aurantium. **Orange.**

From Bagdad, Arabia. Received through Messrs. Lathrop and Fairchild (No. 891, March 8, 1902), April 21, 1902.

Aboul serra. "A navel orange, with seeds, of especially fine aroma, I am told, which is cultivated by Sheik Abdul Kader Kederry, and is worth testing as a new variety. The oranges of Bagdad are in general excellent, and this one, although I was unable to test it, may be no exception." (*Fairchild.*)

8604. Citrus aurantium. **Orange.**

From Bagdad, Arabia. Received through Messrs. Lathrop and Fairchild (No. 892, March 8, 1902), April 21, 1902.

Narinji. "A variety of orange with a 'button' at the flower end; from a tree in the garden of Sheik Abdul Kader Kederry. It has an excellent flavor and has few seeds. This is one of the common varieties of Bagdad, and is an excellent orange." (*Fairchild.*)

8605. Vitis vinifera. **Grape.**

From Bagdad, Arabia. Received through Messrs. Lathrop and Fairchild (No. 893, March 9, 1902), April 21, 1902.

(L. & F. No. 893 is *Citrus aurantium*, but the tube so marked contained grape cuttings without data.)

8606. Citrus decumana. **Pomelo.**

From Bagdad, Arabia. Received through Messrs. Lathrop and Fairchild (No. 894, March 9, 1902), April 21, 1902.

"A species of pomelo or shaddock, of which the skin is used for making preserves. I did not have an opportunity to taste the fruit, but presume it is of second quality." (*Fairchild.*)

8607 to 8642. Citrullus vulgaris. **Watermelon.**

From Monetta, S. C. Received November 5, 1901.

A collection of seeds of hand-pollinated watermelons grown by Mr. T. S. Williams from seed furnished by the Office of Seed and Plant Introduction.

8607. Grown from No. 18.

8608. Grown from No. 25.

8609. Grown from No. 26.

8610. Grown from No. 33.

8611. Grown from No. 39.

8612. Grown from No. 48.

8613. Grown from No. 55.

8614. Grown from No. 84.

8607 to 8642—Continued.

8615. Grown from No. 84.

8616. Grown from No. 85.

8617. Grown from No. 86.

8618. Grown from No. 86.

8619. Grown from No. 87.

8620. Grown from No. 88.

8621. Grown from No. 98?

8622. Grown from No. 98?

8623. Grown from No. 102.

8624. Grown from No. 104.

8625. Grown from No. 2739.

8626. Grown from No. 2740.

8627. Grown from No. 2843.

8628. Grown from No. 2844.

8629. Grown from No. 2845.

8630. Grown from No. 106.

8631. Grown from No. 2846.

8632. Grown from No. 2850.

8633. Grown from No. 3680.

8634. Grown from No. 3680.

8635. Grown from No. 4899.

8636. Grown from No. 6149.

8637. Grown from No. 6170.

8688. Grown from No. 6038.

8639. Grown from No. 6039.

8640. Grown from No. 6046.

8641. Grown from No. 6052.

8642. Grown from No. 6056.

8643. PUNICA GRANATUM. **Pomegranate.**

From Bassorah, Arabia. Received through Messrs. Lathrop and Fairchild (No. 847, February 26, 1902), April 22, 1902.

Mellasi. "A large 'seedless' pomegranate with light-colored flesh. This is said to be the best variety in Arabia and to be quite free from seeds; i. e., the coats of the seeds are probably so delicate that they offer no resistance to the teeth when eating the fruit. Secured through the kindness of Mr. Raphael Sayegh, of Bassorah." (*Fairchild.*)

8644. PYRUS MALUS. **Apple.**

From Bassorah, Arabia. Received through Messrs. Lathrop and Fairchild (No. 848, February 26, 1902), April 22, 1902.

Persian. "This apple will grow well in a region where dates are produced and where for three months the thermometer keeps about the 100° F. mark. It is not of the best quality, but is quite edible, and should be tested in the desert regions of the Colorado River and in the dry regions of Texas. It requires irrigation." (*Fairchild.*)

8645. CYDONIA VULGARIS (?)

From Bassorah, Arabia. Received through Messrs. Lathrop and Fairchild (No. 849, February 26, 1902), April 22, 1902.

Bahamro. "A stock which is used in Arabia, especially in Mesopotamia, on which to graft apples, pears, and quinces. It is reported to be an excellent stock in this very hot region of the Tigris Valley, where the thermometer stands for three months near the 100° F. mark and where it often rises to 117° F. It is cultivated here on adobe soil under irrigation." (*Fairchild.*)

8646. PUNICA GRANATUM. **Pomegranate.**

From Bassorah, Arabia. Received through Messrs. Lathrop and Fairchild (No. 850, February 26, 1902), April 22, 1902.

Nejidi. "A red-fleshed variety of pomegranate which is considered second only to the seedless or *Mellasi* variety. The fruit is large and has a very thin skin." (*Fairchild.*)

8647. Vitis vinifera. **Grape.**

From Bassorah, Arabia. Presented by Hadji Abdulla Negem through Messrs. Lathrop and Fairchild (No. 854, February 25, 1902). Received April 22, 1902.

Abiat. "A white grape which is medium in time of ripening and of reputed excellent quality. It is trained from trunk to trunk of the date palms at Abu Kasib. Soil an adobe with abundant moisture in it." (*Fairchild.*)

8648. Vitis vinifera. **Grape.**

From Bassorah, Arabia. Received through Messrs. Lathrop and Fairchild (No. 855, February 25, 1902), April 22, 1902.

Asuad Suamee. "A black, early grape, with very large berries and rather tough skin, which is cultivated among the date groves at Abu Kassib. The quality of this sort is reported to be exceptionally good. The practice of grape growing under the palms is rapidly spreading in Mesopotamia. It is worthy of trial in Arizona and southern California." (*Fairchild.*)

8649. Vitis vinifera. **Grape.**

From Bassorah, Arabia. Presented by Hadji Abdulla Negem through Messrs. Lathrop and Fairchild (No. 856, February 25, 1902). Received April 22, 1902.

Bengi. "A late, black grape of superior quality, according to the report of Europeans in the region. It is said to be the best variety here in Bassorah and to be really 'as fine as the hothouse-grown *Black Hamburgh.*' Grown under the date palms at Abu Kassib." (*Fairchild.*)

8650. Avena sativa. **Oat.**

From Mustiala, Finland. Received through Messrs. Lathrop and Fairchild from Mustiala Landtbruks och Mejeri-Institut, April 25, 1902.

North Finnish Black.

8651. Fatsia japonica.

From Paris, France. Received through Vilmorin-Andrieux & Co., April 26, 1902.

8652. Triticum dicoccum. **Emmer.**

From Dunseith, N. Dak. Received through Mr. Arthur Hagendorf, April 29, 1902.

8653. Anona cherimolia. **Custard apple.**

From Chile. Presented by Dr. A. W. Thornton, of Ferndale, Wash. Received April 28, 1902.

Cherimoya. Seeds of a choice variety.

8654 to 8679a.

From Ootacamund, India. Presented by R. L. Proudlock, esq., Curator of the Government Botanic Gardens. Received April 30, 1902.

8654. Acrocarpus fraxinifolius.

8655. Cupressus torulosa.

8656. Lasiosiphon eriocephalus.

8657. Meliosma arnottiana.

8658. Rosa gigantea.

8659. Acer oblongum.

8660. Cedrela toona.

8661. Clematis wightiana.

8662. Dalbergia latifolia.

8663. Exacum bicolor.

8664. Ilex wightiana.

8665. Photinia lindleyana.

8666. Pterocarpus marsupium.

8654 to 8679—Continued.

8667. Rhodomyrtus tomentosa.

8668. Urceola esculenta.

8669. Celtis serotina.

8670. Microtropis ovalifolia.

8671. Turpinia pomifera.

8672. Elettaria cardamomum.

8673. Michelia nilagirica.

8674. Phoenix rupicola.

8675. Agapanthus umbellatus.

8676. Cassia grandis.

8677. Pedicularis zeylanica.

8678. Pinus longifolia.

8679. Santalum album,

8679a. Litsea zeylanica.

8680. MANGIFERA INDICA. **Mango.**

From Colombo, Ceylon. Received through Messrs. Lathrop and Fairchild (No. 948, April 6, 1902), May 5, 1902.

Jaffna. "For a description of this variety see No. 8411. I have tasted this mango but find it, although not stringy, far inferior to the *Alphonse* Bombay mango. It lacks the fine aroma and dark orange colored flesh." (*Fairchild.*)

8681 and 8682.

From Heneratgoda, Ceylon. Received through J. P. William & Bros., May 5, 1902.

8681. Coffea liberica. **Coffee.**

8682. Coffea hybrida. **Coffee.**

8683. LUFFA AEGYPTIACA. **Sponge gourd.**

From Springfield, Mo. Presented by Mr. Joe P. Wilson. Received May 10, 1902.

Grown from No. 3982, Inventory No. 8.

8684 and 8685.

From Poona, India. Received through Dr. S. A. Knapp, May 10, 1902.

8684. Triticum durum. **Wheat.**

Kala Kushal.

8685. Andropogon sorghum. **Sorghum.**

Hasar. Grown in Sampayam, Belyaum district.

8686 to 8692.

From Surat, India. Received through Dr. S. A. Knapp, May 10, 1902.

8686. Dolichos lablab. **Bean.**

Kadvá Vál or *Kadvá Wál.*

8687. Vigna catjang. **Cowpea.**

Chowali, Chola, or *Choli.*

8688. Oryza sativa. **Rice.**

Kamoda. From Ahmedabad, Geyarat.

8689. Oryza sativa. **Rice.**

Sunkhavel. From Surat, Geyarat.

8690. Oryza sativa. **Rice.**

Ambamore. From Surat, Geyarat.

8686 to 8692—Continued.

8691. Andropogon sorghum. **Sorghum.**

Sholapuri.

8692. Andropogon sorghum. **Sorghum.**

Perio.

8693. Thea viridis. **Tea.**

From Colombo, Ceylon. Received through Messrs. Lathrop and Fairchild (No. 947, April 6, 1902), May 14 and May 29, 1902.

Assam. "Sent by Mr. Hadden, of Kotiyagala, Ceylon, through Director John C. Willis, of the Peradeniya Gardens." (*Fairchild.*)

8694 to 8697.

From Santiago, Chile. Presented by Señor Federico Albert, chief of the Section of Zoological and Botanical Investigations. Received May 14, 1902.

8694. Aristotelia macqui. **Maqui.**

8695. Kageneckia sp.

8696. Trevoa quinquenervia. **Tralhuen.**

8697. Trevoa trinervia. **Trevu.**

8698. Hibiscus sabdariffa. **Roselle.**

From Punjab, India. Presented by Abdulla Khan, clerk in the office of director of land records, through Dr. S. A. Knapp, agricultural explorer. Received May 14, 1902.

Patma. Common red.

8699. Oryza sativa. **Rice.**

From Hongkong, China. Received through Dr. S. A. Knapp, agricultural explorer, May 16, 1902.

Simi.

8700. Pritchardia gaudichaudii. **Fan palm.**

From Honolulu, Hawaii. Presented by Mr. Jared G. Smith, director of the Hawaii Agricultural Experiment Station. Received May 22, 1902.

8701. Mangifera indica. **Mango.**

From Saigon, Cochin China. Received through Messrs. Lathrop and Fairchild (No. 949, April 16, 1902), May 22, 1902.

Cambodiana or *Xoài Vói.* "This is a delicious mango, of medium size, furnished with a short beak, yellow when ripe, with a faint but agreeable aroma. The flesh varies slightly from light to deep orange in color. Has an excellent, fine, delicate flavor and is never stringy. It is not as rich as the *Alphonse*, of Bombay, either in aroma or flavor, but nevertheless worthy of rank among the best mangoes I have ever eaten. Doctor Haffner, of the botanic gardens of Saigon, informs me that this sort is never grafted, but is a variety which reproduces itself from seed. This being the case, I deem it probable that out of the lot of over a hundred seeds which we are sending some remarkable ones ought to be secured. I believe there is a slight variation among the seedlings, although it is a surprisingly constant variety." (*Fairchild.*)

8702. Zizyphus jujuba. **Jujube.**

From Bassorah, Arabia. Received through Messrs. Lathrop and Fairchild (No. 851, February 26, 1902), May 22, 1902.

Nabug. "The seed in this fruit, instead of being covered with a very hard shell, is like paper, giving the variety the name of being seedless. The tree is the most satisfactory shade tree in this hot region, having a spreading top with somewhat drooping branches covered with small, dark-green leaves. The plant is a most prolific bearer. The fruits when ripe are like Haws in mealiness, and they are keenly relished by the Arabs. They are about one-half to three-fourths inch in diameter. This so-called seedless sort is, paradoxically enough, propagated by seed, and is said to come true to them. It is a tree well suited to the banks of irrigation canals in the hottest regions which we have." (*Fairchild.*)

8703. ZIZYPHUS JUJUBA. **Jujube.**

From Bassorah, Arabia. Received through Messrs. Lathrop and Fairchild, May 22, 1902.

"Seeds of the common jujube largely grown throughout this arid country." (*Fairchild.*)

8704. QUERCUS CORNEA. **Oak.**

From Hongkong, China. Received through Messrs. Lathrop and Fairchild (No. 950, April 29, 1902), May 22, 1902.

"Edible acorns from a species of oak which grows in southern China, even on the island of Hongkong. The acorns have a hard, horny shell and a sweet flesh of very agreeable flavor. The acorns are sent in very large quantities to Hongkong from Canton. They are eaten by the Chinese with great pleasure, and are often roasted. They would be acceptable, I believe, to Americans, and the tree ought to do well in the Southern States. If the tree, which is a pretty one, proves a success, large quantities can be had through the botanic gardens at Hongkong, but only at this season of the year." (*Fairchild.*)

8705. PRUNUS sp. **Plum.**

From Hongkong, China. Received through Messrs. Lathrop and Fairchild (No. 951, April 19, 1902), May 22, 1902.

"A beautiful little plum, said to be grown in Canton. It was purchased on the Hongkong market. It is of a beautiful, transparent, wine red color, with a delicate skin which is covered with the finest, most delicate pubescence imaginable, resembling a bloom which can not be rubbed off. When ripe the fruit has a delicate, agreeable aroma, which is that of a half-ripe Japanese quince. In taste the plum is not very good, but decidedly refreshing. It is sour with a slightly bitter taste. The flesh is yellow in color and inclined to be solid and stringy. The stone is a cling, being covered with many long fibers. In shape it is pointed with a distinct keel. The skin is very delicate but in flavor is *intensely bitter*. It separates from the flesh with difficulty." (*Fairchild.*)

8706. CITRUS AURANTIUM. **Orange.**

From Kabylia, Algeria. Presented by Dr. L. Trabut, Government Botanist, Mustapha, Algiers, Algeria. Received May 26, 1902.

Bandja. A late, sweet orange, which reproduces itself from seed.

8707. PISTACIA MUTICA. **Menengech.**

From Smyrna, Asia Minor. Presented by Mr. George C. Roeding, of Fresno, Cal. Received May 26, 1902.

8708. PRITCHARDIA MARTII. **Fan palm.**

From Olaa, Hawaii. Presented by Mr. Jared G. Smith, special agent in charge of the Hawaii Agricultural Experiment Station at Honolulu.

From an altitude of from 2,000 to 2,500 feet.

8709. EUCOMMIA ULMOIDES.

From Paris, France. Received through Vilmorin-Andrieux & Co., May 29, 1902.

Tu Chung. Rooted cuttings of this Chinese plant. It is used medicinally. It is claimed that the leaves contain a large amount of gutta-percha.

8710 to 8726. PYRUS MALUS. **Apple.**

From New South Wales, Australia. Presented by Messrs. Hunter & Sons, of "The Penang," near Gosford, through Hon. D. C. McLachlan, undersecretary, department of mines and agriculture, Sydney, to replace trees and cuttings received in bad condition in June, 1901. Received May 29, 1902. Hunter & Sons' numbers are given.

Apple trees as follows:

8710.

Allsops early. (No. 237.)

8711.

American Golden Pippin. (No. 256.)

8712.

Carrington, Small's. (No. 238.)

8713.

Early Richmond. (No. 83.)

8714.

George Neilson. (No. 157.)

8715.

Lady Hopetown. (No. 234.)

8716.

Menagerie. (No. 220.)

8717.

Perfection, Shepherd's. (No. 4.)

8718.

Sharp's Early. (No. 232.)

8719. (Label missing.)

Apple scions as follows:

8720.

Autumn Tart.

8721.

Chestattee. (No. 221.)

8722.

Fall Beauty. (No. 80.)

8723.

Jupp's Carrington. (No. 210.)

8724.

Lord Wolseley. (No. 50.)

8725.

Ruby Pearmain. (No. 228.)

8726.

Yarra Bank. (No. 252.)

8727. MANGIFERA INDICA. **Mango.**

From Bombay, India. Received through Messrs. Lathrop and Fairchild (No. 814, January 28, 1902), June 5, 1902.

Douglas Bennett's Alphonse. "Named in honor of the superintendent of markets in Bombay, who has called our attention to this superlative strain and who has very kindly donated to the American Government the trees which he guarantees to be of this special variety. This sort should be compared with No. 8419, which latter number is composed of scions from the tree of which these are believed to be grafts." (*Fairchild.*)

8728. GOSSYPIUM BRASILIENSE (?) **Kidney cotton.**

From Ciego de Avila, Cuba. Presented by Mr. Felix M. Catala. Received June 5, 1902.

Wild Cuban kidney cotton.

8729 to 8734. MANGIFERA INDICA. **Mangoes.**

From Bombay, India. Received through Messrs. Lathrop and Fairchild (No. 944, March 30, 1902), June 7, 1902.

A collection of trees donated to the Department by Mr. J. N. Tata, of Bombay, who has a very large collection of the best mangoes from all over India. These are those he considers the finest of his whole collection, which is one of the largest in the world. These include, doubtless, some of the most valuable sorts of mangoes of all India.

8729.

Nowshirwani.

8730.

Paheri.

8731.

Ameeri.

8732.

Totafari.

8733.

Hafu or *Alphonse.*

8734.

Jamshedi.

8735. CURCUMA LONGA. **Turmeric.**

From Bombay, India. Received through Dr. S. A. Knapp, June 7, 1902.

8736. ZINGIBER OFFICINALE. **Ginger.**

From Bombay, India. Received through Dr. S. A. Knapp, June 7, 1902.

8737. TRITICUM DURUM. **Wheat.**

From Bombay, India. Received through Dr. S. A. Knapp, June 7, 1902.

Hansoli. Grown at Surat, in Gujarat.

8738 to 8745. PHOENIX DACTYLIFERA. **Date palm.**

From Bagdad, Arabia. Received through Messrs. Lathrop and Fairchild (Nos. 866 to 873, March 10, 1902), June 7, 1902.

8738.

Kustawi. "Considered one of the two best dates in the region of Bagdad. It is a variety which, though acknowledged to be far superior to the sorts which are sent to America, is not exported because of its poor shipping quality. If this date succeeds in America it can, without doubt, be easily shipped by rail, as I have eaten here in Bagdad good specimens over five months old. It is a sticky sort, as packed by the Arabs, although I believe its skin is thick enough to allow of its being packed as the *Deglet Noor* of Algiers is packed. The fruit is not over 1¼ inches long, as judged by dry specimens, and has a seed about seven-eighths inch in length by five-sixteenths inch in diameter. The flesh is not very thick, but exceedingly sweet and, like the other good dates of this region, of a decidedly gummy consistency. It is placed by the Arabs second in rank to the *Maktum*, which is richer in sugar and somewhat fleshier. I have only tasted the *Maktum* once, but I believe it superior in flavor to the *Kustawi*, owing to the fact that the region of Bagdad is much drier than that of Bassorah. This date is probably better suited to conditions prevailing in California and Arizona than the sorts grown in Bassorah. It is considered, however, one of the most delicate dates to cultivate, requiring much more care than such sorts as the *Zehedy*, *Ascherasi*, and *Bedraihe*. Not being a date for export the price is low, as is the case with the *Berhi* of Bassorah. It sells for about $2.60 to $3 per 210 pounds, while the *Bedraihe* brings about $4 to $4.40. This variety begins to ripen about the 1st of August in this exceedingly hot climate. It should be planted with the growing bud 2 inches above the soil. The best ground will be an adobe, like the silt of the Colorado River, or such as occurs in certain places on the experimental farm at Phoenix. This sort is said to be a good bearer, but I do not know just how heavy the yields are. There is very little fiber to the date, and it is altogether an exceptionally fine sort." (*Fairchild.*) (No. 866.)

8739.

Ascherasi. "One of the highest-priced dates on the market in Bagdad. It is, as I have seen it, always a more or less dry sort, never pressed into a conglomerate mass in the way the other sorts are. It is the sort preferred by

8738 to 8745—Continued.

Bagdadians to eat with walnuts, and is preferred by many to any other kind. Personally, I found it a very eatable date, and it has the very great advantage of not soiling the hands. The flesh is, however, even when fresh, hard enough to allow shipping. In fact the dates are even sent, when fresh, from Mundeli to Bagdad in skins. Generally, however, the fruit is allowed to dry on the tree until it becomes hard. It is not exported from Bagdad, but consumed in Mesopotamia. The price sold dry is about $3.20 to $3.60 per 100 kilos on the Bagdad market. It is suited to a region with less water than that of Bassorah. It matures about the middle of September to the 1st of October in Bagdad." (*Fairchild.*) (No. 867.)

8740.

Bedraihe. "This ripens in September and the first of October, and is allowed to dry on the trees. As sold here in the markets it is a yellow date, about 1¼ to 1½ inches long and three-fourths inch to 1 inch in diameter. The base of the date is quite dry, as I have seen it, but the tip is transparent or semitransparent and quite sweet, although at this season of too gummy a consistency to be agreeable. In Bagdad this date is generally sold dry, and brings $4 to $4.20 for 210 pounds, i. e., it is the most expensive according to weight, but the other sorts, having a great deal of water in their composition, contain proportionately less food. Many Bagdadians prefer this sort, when fresh and softer, to all other kinds. There is an immense consumption of this variety in Bagdad. I believe this date would be a success in America because it is so different from other sorts, and for the reason that it is a remarkably good keeper, and when not too old is really very good eating. It is far superior to the dry dates of Egypt, and not to be confused with dry dates in general, for it has scarcely any disagreeable fibers about the seed. It deserves attention in American plantations." (*Fairchild.*) (No. 868.)

8741.

Maktum. "Considered by the Arab sheik, Abdul Kader Kederry, of Bagdad, to be the finest date, except one, in the world, the *Mirhage* from Mandele, which it resembles, being superior. It is a date not often seen on the Bagdad market, and I was unable to get any of good quality to taste. A very fine date, which was said to be of the *Maktum* sort, which I tasted, was a richer date than the *Kustawi*, although of the same general type. The probabilities are that this is a delicate sort which produces only a small quantity of fruit. The date I tasted came from Kasimain, but the tree is cultivated up the river from Bagdad. These trees were donated to the Department by Sheik Abdul Kader Kederry, of Bagdad." (*Fairchild.*) (No. 869.)

8742.

Burni. "For a description of this date see No. 8569. I believe it properly belongs to Maskat. It being winter I am not able to verify the identification of these varieties, but must buy the plants of Arabs or others who know the sorts." (*Fairchild.*) (No. 870.)

8743.

Zehedi. "This is probably the commonest date about Bagdad. It is the *quickest to develop* and the *heaviest yielder of all the dates about Bagdad*, according to Mr. Raphael Casparkan, of Bagdad, who very kindly donated a lot of twenty-four palms to the Department, including part of these. It is a cheap date here, selling for only $1.40 to $2 per 210 pounds. The date is small, not over 1½ inches long by three-fourths inch in diameter. It is not entirely like Egyptian dates, but is so dry that the individuals do not stick together. They have very little fiber, the stone is small, and the flesh quite sweet even when dry. When fresh this sort is packed in skins and exported to Egypt and Singapore, under the name of *Kursi*. It is often sold on the bunch when fresh and called *Zehedi Gus*, in which shape it is very highly thought of. I tasted the so-called *Kursi* and found it decidedly inferior in flavor and amount of flesh to the *Kustawi*. The variety is, however, I am assured, *the most resistant of any, so far as water is concerned, being quite drought resistant*, and although the

8738 to 8745—Continued.

product is a cheap one, the heavy yields make it a very profitable sort. It ripens about September or October. It sells in Bagdad (dry), I am told, for $1.40 to $2 per 210 pounds." (*Fairchild.*) (No. 871.)

8744.

Barban. "This date is reported to ripen in July and yield only fairly good fruits. It is the earliest ripening of the Bagdad dates, I am told, and deserves a place in the gardens for this reason. This variety is red before ripening but turns black when mature. It is not a very sweet sort, and not very highly thought of by the Bagdadians. It is rarely cultivated except outside of Bagdad. Its early ripening qualities are what make it worthy of trial in America. It is probable that this sort will not ripen so early in America because the amount of heat is probably considerably less." (*Fairchild.*) (No. 872.)

8745.

Sukeri. "A very large variety of date, said by Mr. Raphael Casparkan to be 2 inches or more in length, and when fresh, to be of good quality. Mr. Casparkan donated these to the Government, and the determinations are his, for I could not distinguish the different varieties which he selected. Worthy of trial in Arizona on account of its large size." (*Fairchild.*) (No. 873.)

8746 to 8752. PHOENIX DACTYLIFERA. **Date palm.**

From Bassorah, Arabia. Received through Messrs. Lathrop and Fairchild (Nos. 895 to 901, February 25, 1902), June 7, 1902.

8746.

Berhi. "A variety of date which, though never shipped to the American market, is said by every one in this region to be unquestionably the best date in this part of the Persian Gulf, inferior only to the *Khalasa* date of Hassa. It ripens, as do most all these Shat-el-Arab dates, in the month of September, and it is therefore likely to prove very valuable because of its superior quality and its early ripening character. It ripens in September in Bassorah, where the temperature goes to 117° F. in the shade. It is a sticky date, but nevertheless a variety with a very fine flavor, and grows well on adobe alluvial deposits. It is watered by canal irrigation as often during the year as the tide rises, viz, twice a day. I have tasted this *Berhi*, and it is superior to the *Halawi*, the principal export sort, and also to the *Taberzal*. The seed is very small." (*Fairchild.*) (No. 895.)

8747.

H'weis or *Hevezi.* "One of the best dates of the Persian Gulf. A delicate, light-colored date of medium size, with medium-sized stone. It ripens in Bassorah in September. It is very little known, even at Bassorah. Grown, as are all of the dates on the Shat-el-Arab River, in stiff clay, almost adobe soil, in raised areas surrounded by canals, which are flooded twice a day by water from the river as it is backed up by the tides, the variety is a sticky sort, but deserves the serious attention of experimenters with date palms, on account of its superior flavor and excellent color. The summer temperature of Bassorah rises to 117° and sometimes to 120° F. in the shade. In winter it drops to below 50°. The soil where the date is grown is distinctly saline. This date has not been shipped to American markets, but would be a good selling date, and for this reason it is well worth planting in southern California (Colorado Desert) and Arizona." (*Fairchild.*) (No. 896.)

8748.

Sayer or *Ustaamran.* "A variety of date darker in color than the *Halawi*, but of fair flavor. A standard sort in New York. It is said to do best on a light sandy soil, and to require less water than No. 8747. *Sayer* is a word also used to indicate a mixed lot of dates, but these trees are of a distinct long fruited dark sort. The trees are taller than those of the variety *Halawi*, and not so uniformly straight. This sort is most likely to succeed on sandy soils, or, at least, to do better on sandy than on ordinary adobe soil. It is inferior in quality to *Halawi* and *Khadrawi*, but, nevertheless, a good market date. It is grown here very extensively." (*Fairchild.*) (No. 897.)

8746 to 8752—Continued.

8749.

Gunnami. A male variety. "Considered by Hadji Abdulla Negem as the best pollen-producing male in this region. It holds its pollen best, and the latter is found to be 'stronger' than that of any other sort. One male tree suffices for 100 female trees." (*Fairchild.*) (No. 898.)

8750.

Halawi. "One of the standard sorts grown on the Shat-el-Arab River, of Arabia, and it is one of the principal dates shipped to the American market. There must be millions of trees of this variety along the river. A fairly light-colored date, short and thick, with a good-sized stone, and very little fiber about the seed. Grown under the same conditions as No. 8747, and ripens in September." (*Fairchild.*) (No. 899.)

8751.

Khadrawi. "A darker colored, longer date than the *Halawi*, and inferior to it. It is one of the standard sorts for shipment to America, but is not a delicate skinned variety; therefore an excellent packing date. It is a sticky date, and ripens in September or the first of October." (*Fairchild.*) (No. 900.)

8752.

Unnamed variety. "Sent without label from Abu Kassib, by Hadji Abdulla Negem, with Nos. 8746 to 8752, for all of which I am indebted to the kind assistance of Mr. H. P. Chalk, agent of Hills Bro. & Co., of New York." (*Fairchild.*) (No. 901.)

8753. PHOENIX DACTYLIFERA. **Date palm.**

From Hassa, Arabia. Received through Messrs. Lathrop and Fairchild (No. 905, March 17, 1902), June 7, 1902.

Khalasa or *Khalasi.* "This date is known all over the Persian Gulf as one of the three best dates. It certainly has few equals, and its only rivals are the *Maktum*, *Taberzal*, and *Berhi*, and probably also, though I have not tasted it, the *Mirhage*. Palgrave, author of 'Travels in Eastern Arabia,' 1863, says the literal translation of the name *Khalasi* is 'quintessence,' and that it 'is easily first of its kind.' The country in which it is grown is, according to Zwemer, a sandy one, with underground springs or water courses, water being reached only a few feet below the surface of the soil. This country of Hassa or El Hassa lies 60 miles or so inland from Bahrein Island, and these palms were brought by camels from that region. The climate in winter is hot in daytime, but cold at night, and in summer it is excessively hot. This variety matures its fruit, I presume, sometime in August or September, though I can not state this positively. It is a variety worthy the serious consideration of our date growers, as it will probably be better suited to our conditions than the Bassorah dates, which will require more water to bring them to full development. We are indebted to H. B. M. Vice-Consul J. C. Gaskin, of Bahrein, for securing these sets and for many other favors, and also to Mr. H. M. Zwemer for information about Hassa dates." (*Fairchild.*)

8754 to 8761. PHOENIX DACTYLIFERA. **Date palm.**

From Maskat, Arabia. Received through Messrs. Lathrop and Fairchild (Nos. 906 to 913, March 21, 1903), June 7, 1903.

8754.

Fard. "A long, large-sized, late date, of dark color but good flavor. About 1,000 tons of this date are exported from Maskat to America every year, it being the principal export date of the region of Maskat. These young palms were brought from Semail, 50 miles in the interior, where there are extensive plantations of this and other sorts. There are estimated by Vice-Consul Mackirdy, who very kindly secured these for the Department, to be half a million date trees in the Semail Valley. This date ripens in August and sells for $40 Mexican per 1,800 pounds. It is the best flavored soft packing date in the region. It is adapted to the hottest regions in America." (*Fairchild.*) (No. 906.)

8754 to 8761—Continued.

8755.

Burni. "This is a light-colored date about the same size as the *Fard*, but thinner, also from Semail. It ripens in Maskat in July. It was formerly shipped to America, but was found to be a poorer keeper than the *Fard*, and now it is no longer demanded. Because of its scarcity it sells for $50 Mexican per 1,800 pounds." (*Fairchild.*) (No. 907.)

8756.

Nagal. "An early variety from Semail, 50 miles in the interior, *ripening in June.* It is a light-colored date about 1¼ inches long and three-fourths inch in diameter. It is not as sweet as the *Fard*, but is highly prized because *it is the earliest date in the region.* It is consumed locally and only in a fresh condition. High prices are paid for it by the Arabs. It is a soft sort, resembling the *Fard.*" (*Fairchild.*) (No. 908.)

8757.

Mubsali. "From Semail, 50 miles inland from Maskat. This date is a long, large variety, which is picked before being ripe, boiled for an hour in salt water, and then spread out in the sun to dry. (See Nos. 8563 and 8564.) These dates, which are as hard as stick candy, and almost as sweet, are sold in India, where there is a big demand for them, and where higher prices are paid than for the ordinary *Fard* variety. They sell for $80 Mexican per 1,800 pounds. This belongs to the *Karak pokhta* class of dates, which are served in India at every wedding and festival. They are sometimes eaten fresh. It is the best paying date in Maskat. Suitable for dry, hot regions. It ripens in July." (*Fairchild.*) (No. 909.)

8758.

Khanezi. "From Semail, 50 miles inland from Maskat. An almost round, soft, very sweet sort, only consumed locally. It is a rare variety, ripening in July. It is eaten in the fresh state and considered one of the best of this kind in Maskat." (*Fairchild.*) (No. 910.)

8759.

Khassab. "From Semail, 50 miles inland from Maskat. A red variety when ripe, somewhat shorter in shape than the *Fard.* It ripens in August. It is a soft variety, therefore not a shipping date. It is reported to be the heaviest yielder of any, as much as 450 pounds being borne by a single tree. It is not as sweet as the *Fard*, but is still of good quality." (*Fairchild.*) (No. 911.)

8760.

Hellali. "From Semail, a date region 50 miles back of the town of Maskat. It is as round fruited as a walnut, light colored and soft. It is not a packing date but is used fresh. The bunches are exceedingly large. A rare sort even in Maskat." (*Fairchild.*) (No. 912.)

8761.

"*Fachl* or *Fahel*, meaning *male* date, from the valley of Semail, 50 miles in the interior behind Maskat. This is the variety used in this great valley, where half a million trees are grown, as the pollinator. It might be called simply *Semail Fahel*, to distinguish it from the Egyptian *Fahel* or male sent in 1900." (*Fairchild.*) (No. 913.)

8762 to 8785. PHOENIX DACTYLIFERA. **Date palm.**

From Kej, Baluchistan. Received through Messrs. Lathrop and Fairchild (Nos. 914 to 937, March 23, 1902), June 7, 1902.

A collection of date palms secured through the kindness of Lieutenants Grant and Maxwell, of the First Baluchistan Light Infantry, from Kej, a region six days by camel from Guadur, near the Pangh Ghur region. The soil is an adobe but mixed with small rocks. It is watered from artificial wells. The palms are as follows:

8762.

Mozati. One of the finest flavored dates in the world. It is sent in earthen jars, packed in the sirup of inferior sorts, to Kurrachee and Bombay. It is said to ripen in July. It is a large, round sort with small stone, golden brown flesh, and delicate skin. (No. 914.)

8763.

Gush. A male variety. (No. 915.)

8764.

Apdandon. (No. 916.)

8765.

Soont Gora. (No. 917.)

8766.

Hashna. (No. 918.)

8767.

Gonzelli. (No. 919.)

8768.

Jalghi. (No. 920.)

8769.

Bagum Jurghi. (No. 921.)

8770.

Shukkeri. (No. 922.)

8771.

Koroch. (No. 923.)

8772.

Hallani. (No. 924.)

8773.

Shapego. (No. 925.)

8774.

Dishtari. (No. 926.)

8775.

Chupshook. (No. 927.)

8776.

Korroo. (No. 928.)

8777.

Rogani. (No. 929.)

8778.

Churpan. (No. 930.)

8779.

Kharba. (No. 931.)

8780.

Dundari. (No. 932.)

8781.

Subzoo. (No. 933.)

8782.

Gond Gorbug. (No. 934.)

8783.

Washclont. (No. 935.)

8784.

Kalara. (No. 936.)

8785.

Hurshut. (No. 937.)

8786 to 8793. PHOENIX DACTYLIFERA. **Date.**

From the vicinity of the Persian Gulf. Received through Messrs. Lathrop and Fairchild, June 7, 1902. Samples of dried dates as follows:

8786.

Bedraihe. From Bagdad market. (No. 868.) (See No. 8740.)

8787.

A variety sold in the Kurrachee market in two-gallon earthen jars. It is said to come from the interior of Baluchistan. Its name is not known.

8788.

Kadrawi. (No. 900.) (See No. 8751.)

8786 to 8793—Continued.

8789.

Kustawi. From Bagdad market. (No. 866.) (See No. 8738.) A very fine date, though somewhat stringy.

8790.

Berhi. Dates as packed in paper cartons for European market. (No. 895.) (See No. 8746.)

8791.

Halawi. Dates as packed in paper cartons for export to all parts of the world. (No. 899.) (See No. 8750.)

8792.

Busser. From Bassorah, Arabia. An inferior variety.

8793.

Zehedi. "From Bagdad market." (*Fairchild.*) (No. 871.) (See No. 8743.)

8794. PHOENIX DACTYLIFERA. **Date.**

From Bagdad, Arabia. Received through Messrs. Lathrop and Fairchild (No. 885, March 10, 1903), June 7, 1902.

Taberzal. "Sample of dried dates. This is a rare date even at Bagdad, and I did not find it on the markets. Agha Mohammed, British consular agent at Kasimain, very kindly donated these to the Department. It is a small date $1\frac{1}{4}$ to $1\frac{3}{8}$ inches long by about seven-eighths inch in diameter. When dry it is of an amber color. The skin is a lighter shade than the flesh, is loose, rather papery in texture, and can be removed with the fingers from the dried flesh. The flesh is never dry in the sense of being hard, but has the consistency of a chocolate caramel and is sweet and of characteristic date flavor. The seed is of medium size and fits loosely in the dry flesh. There is scarcely any fiber about the seed. The stem has a trifle too large disk (involucre), but is easily removed with the fingers. When fresh it is considered one of the most delicate dates in Bagdad, though not so fine or so large as the *Berhi* (No. 8746), which it resembles. I have not seen the *Berhi*, but take this as the opinion of a date shipper. These dates, if not pressed into skins or cases, are dry enough to be handled with the fingers. This is a point of great importance. The *Deglet Noor* of Algiers would probably be quite as unappetizing if pressed into baskets or boxes. I secured these samples too late to make it possible to secure plants, but they can be had through Vice-Consul Hürner, of Bagdad, from Agha Mohammed, who donated these." (*Fairchild.*)

8795. PHOENIX DACTYLIFERA. **Date.**

From Bagdad, Arabia. Received through Messrs. Lathrop and Fairchild, June 7, 1902.

Ascherasi. Samples of dates. (See No. 8739, L. & F. No. 867.)

8796 and 8797. VITIS VINIFERA. **Grape.**

From Kandahar, India. Received through Messrs. Lathrop and Fairchild, June 7, 1902.

Samples of raisins bought in the Kurrachee market.

8796.

Seedless. Very sweet and thoroughly candied.

8797.

A large, light-colored raisin with seeds.

8798. GOSSYPIUM sp. **Cotton.**

From Arabia. Received through Messrs. Lathrop and Fairchild, June 7, 1902.

"Probably from the garden of Abdul Kader Kederry, on the Tigris River." (*Fairchild.*)

8799. CAPSICUM ANNUUM. **Red pepper.**

From Bassorah, Arabia. Received through Messrs. Lathrop and Fairchild (No. 852, February 26, 1902), June 7, 1902.

"A lance-shaped variety of red pepper from the market of Bassorah. The fruits are not over 1 inch to 1¼ inches long." (*Fairchild.*)

8800. PISTACIA VERA × (?) **Butum.**

From Bagdad, Arabia. Received through Messrs. Lathrop and Fairchild (No. 874, March 9, 1902), June 7, 1902.

"A small packet of seeds from the market of Bagdad. These may be hardier than the European butum." (*Fairchild.*)

8801. PISTACIA MUTICA. **Menengech.**

From Bagdad, Arabia. Received through Messrs. Lathrop and Fairchild (No. 874, March 9, 1902), June 7, 1902.

"Sample of seed from Bagdad market. These may prove hardier stocks than the European sorts." (*Fairchild.*)

8802. (Undetermined.) **Sissi.**

From Bagdad, Arabia. Received through Messrs. Lathrop and Fairchild (No. 875, March 11, 1902), June 7, 1902.

"Seeds brought from the mountains of Persia beyond Mosul. They are edible and are eaten by the Arabs as the Chinese eat melon seeds. The flesh is sweet, but there is little of it. The plant which produces these fruits is said to be a shrub and likely to withstand desert conditions." (*Fairchild.*)

8803. AMARANTHUS HYPOCHONDRIACUS (?) **Chagoggee.**

From Wönsau, Korea. Presented by Mr. C. F. S. Billbrough, of Wönsau, through Messrs. Lathrop and Fairchild (No. 773), June 10, 1902.

"Used in Korea as an ornamental, having masses of bright red foliage. The plant is an annual, 6 feet high. It is used by the natives for food, being boiled like cabbage. It is, further, much relished by stock. It should be grown for identification and may prove a new thing as an ornamental or may be of use as a fodder plant." (*Fairchild.*)

8804. ORYZA SATIVA. **Rice.**

From Niuchwang, China. Presented by Hon. Henry B. Miller, United States consul, through the Department of State. Received June 10, 1902.

K'ien Tzu. "Dry land rice, sown the last of April or the first of May and harvested early in September. It grows best on low land or on rich yellow soil. It must not be flooded, but requires rain at the time the grain is forming. It will not grow on high, dry clay land." (*Miller.*)

8805. PANICUM MILIACEUM. **Broom-corn millet.**

From Bassorah, Arabia. Received through Messrs. Lathrop and Fairchild (No. 853, February 25, 1902), June 7, 1902.

Dukkhn. "A kind of millet which is sown on the mud after flooding the soil with irrigation water and left to mature its crop without further watering. It is said to produce and ripen its heads in forty days, so that two crops are generally grown each year on the same soil. This is sent for trial in the Colorado Desert region and western Texas." (*Fairchild.*)

8806. MEDICAGO SATIVA. **Alfalfa.**

From Bassorah, Arabia. Received through Messrs. Lathrop and Fairchild (No. 904, March 15, 1902), June 7, 1902.

Djet. "This is treated like any alfalfa (see No. 8823). This is given a separate number as it comes from 500 miles south of the locality whence No. 8823 was sent. Secured through the assistance of Mr. Raphael Sayegh, of Bassorah." (*Fairchild.*)

8807. CICER ARIETINUM. **Chick-pea.**

From Bassorah, Arabia. Received through Messrs. Lathrop and Fairchild (No. 903, March 15, 1902), June 7, 1902.

Humus. "Sold everywhere on the markets of Mesopotamia. It is suited to very hot regions with little water. Sent for trials in California and Arizona." (*Fairchild.*)

8808. TRITICUM DURUM. **Wheat.**

From Bassorah, Arabia. Received through Messrs. Lathrop and Fairchild (No. 902, March 16, 1902), June 7, 1902.

Karun. "A hard wheat which is grown on the river Karun in Persia. It is reported to be the best wheat coming to the Bassorah market and is grown in a region where scant rains fall and which is exposed to excessive hot weather. Suited for our dry, hot Southwest." (*Fairchild.*)

8809. HORDEUM TETRASTICHUM. **Barley.**

From Bagdad, Arabia. Received through Messrs. Lathrop and Fairchild (No. 886, March 10, 1902), June 7, 1902.

Black. "The native barley of the Tigris Valley above Bagdad. It should be suited to culture in our dry Southwest, as it is a short season variety and depends on the scanty rains in January and February for its moisture. I understand that this barley is sometimes exported to Europe." (*Fairchild.*)

8810. LATHYRUS CICER. **Pea.**

From Bagdad, Arabia. Received through Messrs. Lathrop and Fairchild (No. 880, March 9, 1902), June 7, 1902.

Hortuman. "A species of the pea family, which in the market is called *Hortuman*, but, according to the dictionaries, *Hortuman* means *oat*, and this is evidently one of the Leguminosæ. It is cultivated by planting in hills or drills, and grows, according to the very unsatisfactory information which I could pick up, to a height of about 2 feet. The grains are produced in a pod and they form the valuable product of the plant. The straw is, however, also said to be fed to cattle, but has not any great value. The grain is exceedingly hard and requires grinding before it can be used. It is then cooked with rice or boiled and eaten alone. It is grown without much water, but generally on irrigated lands. It is suitable for trial in the extremely hot regions of the Colorado Desert. Its use as a soiling crop is quite unknown, but it may be of considerable value, nevertheless, for people here are evidently quite ignorant of soiling crops. Bought in the bazar at Bagdad, where it is not at this season a very common grain." (*Fairchild.*)

8811. TRITICUM DURUM. **Wheat.**

From Bagdad, Arabia. Received through Messrs. Lathrop and Fairchild (No. 879, March 9, 1902), June 7, 1902.

Hurma. "A large-grained, hard wheat which is called *Hurma*, meaning widow, because of the large size of the grains. This sample comes from the wheat-growing region of Mosul and is cultivated without irrigation. It deserves a trial in our arid-region experiments." (*Fairchild.*)

8812. TRITICUM VULGARE. **Wheat.**

From Bagdad, Arabia. Received through Messrs. Lathrop and Fairchild (No. 878, March 9, 1902), June 7, 1902.

Kermansha. "The finest looking soft wheat to be found on the Bagdad market. It comes from Kermansha, in Persia, where it is grown without irrigation. It brings a lower price than the *Kurdistan* and *Karoon* wheats, because it is soft and has not the 'strength' of the latter, which is necessary in the making of the Arabic 'Hubus' or pancake-like bread. It is worth a trial in dry regions." (*Fairchild.*)

8813. TRITICUM DURUM. **Wheat.**

From Bagdad, Arabia. Received through Messrs. Lathrop and Fairchild (No. 877, March 9, 1902), June 7, 1902.

Kurd. "A wheat grown in Kurdistan and brought down to the Bagdad market. It is used for bread making and brings good prices, being, in fact, one of the highest priced wheats in the Bagdad market. Bread from this wheat is made in thin sheets like German pancakes and has a decided mixture of the macaroni wheat flour in it. This wheat is harder than No. 8812. The *Kurd* wheats and the *Karun* or *Karoon* wheats are considered the best sorts sold in Bagdad and I understand they are grown without irrigation, depending only upon the scanty rains. They should be tested to show their resistance to rust and drought." (*Fairchild.*)

8814. PHASEOLUS VIRIDISSIMUS. **Bean.**

From Bassorah, Arabia. Received through Messrs. Lathrop and Fairchild (No. 864, March 3, 1902), June 7, 1902.

Maash. This is grown in Mesopotamia and used as food. It is employed with rice and even boiled and eaten alone. It is planted in drills or hills, like ordinary string beans, and grows to a height of 2 feet or more. This resembles, I am informed, the *Merjemek* of Turkey. I think this is the same species as No. 6430 sent in 1901 as *Phaseolus viridissimus*, secured in Athens, Greece. This bean should be tested in the irrigated lands of the Southwest, and as a vegetable throughout the Southern States of America." (*Fairchild.*)

8815. ANDROPOGON SORGHUM. **Sorghum.**

From Bassorah, Arabia. Received through Messrs. Lathrop and Fairchild (No. 863, February 25, 1902), June 7, 1902.

Edra. "A kind of sorghum like the *Dura* of the Egyptians. This is a white variety grown in this hot region where the temperature often goes to 117° F. and during the summer ranges between 85° and 99° F. day and night. No other irrigation than that of the rains is received by the plants, and yet it is said that it can be relied upon generally to give a fair crop. It is worth trying on the scorching deserts of California. The grain makes excellent second-class food." (*Fairchild.*)

8816 to 8819. TRITICUM. **Wheat.**

From Bassorah, Arabia. Received through Messrs. Lathrop and Fairchild (Nos. 857 to 861, February 25, 1902), June 7, 1902.

"A collection of wheats from the Euphrates, Tigris, and Karun river valleys, which are the three great wheat growing regions of Mesopotamia. These wheats are not generally grown by irrigation but depend upon the rains for their water, and as the climate is a dry and excessively hot one and the soil an adobe, inclined to be alkaline, these wheats deserve trial in similar excessively hot regions in America. Their rust-resisting qualities I know nothing about. With the exception of the Karun variety they are not especially fine wheats, but from their very long culture here in Mesopotamia they should be tried in the Colorado Desert region and on any stiff soil which is subject to droughts. Larger quantities may be had by corresponding with Mr. H. P. Chalk, of Bassorah, referring to the varieties by name. These are exposed two months to a summer shade temperature of 117° to 120° F. and stand it well. The wheats are as follows." (*Fairchild.*)

8816. TRITICUM DURUM.

Buetha. A hard wheat from Arag, on the Euphrates River. (No. 858.)

8817. TRITICUM VULGARE.

Bagdad. A soft variety from Bagdad. (No. 859.)

8816 to 8819—Continued.

8818. TRITICUM DURUM.

Koola. A hard wheat from Kurdistan; exact origin in doubt. (No. 860.)

8819. TRITICUM DURUM.

Humera. A hard sort of dark color, from Arag, on the Euphrates River.

8820. TRITICUM DURUM. **Wheat.**

From Bagdad, Arabia. Received through Messrs. Lathrop and Fairchild (No. 876, March 9, 1902), June 7, 1902.

Hurma. "A hard wheat grown at Desphuli, in Persia, near the Karun River. This sample was bought on the market in Bagdad. It is grown in a region noted for its extreme summer heat and scanty rains and should be suited to arid-land conditions. Exact data were unobtainable." (*Fairchild.*)

8821. PANICUM MILIACEUM. **Broom-corn millet.**

From Kurrachee, India. Received through Messrs. Lathrop and Fairchild (No. 943, March 27, 1902), June 7, 1902.

San China. "Grown on the Sewage Farm at Kurrachee. It is an excellent forage crop, and should be tried, though not new to America, in the Colorado Desert region. The grain is fed to cattle and working bullocks. It is coarse, but is said to be a profitable crop. The yields are large. It is possibly a different strain from the ordinary." (*Fairchild.*)

8822. ZEA MAYS. **Maize.**

From Bagdad, Arabia. Received through Messrs. Lathrop and Fairchild (No. 884, March 11, 1902), June 7, 1902.

"A Mesopotamian maize, given me by Agha Mohammed, of Kasimain. It is the variety commonly grown in the region and is sent as illustrating the low condition of agriculture in this wonderful region." (*Fairchild.*)

8823. MEDICAGO SATIVA. **Alfalfa.**

From Bagdad, Arabia. Presented by Agha Mohammed, the Nawab at Kasimain and consular agent at that place for His British Majesty. Received through Messrs. Lathrop and Fairchild (No. 881, March 10, 1902), June 7, 1902.

Djet or *El-djet.* "A larger quantity of seed can be secured through arrangement with the American vice-consul at Bagdad, Mr. Rudolph Hürner. Although the Nawab admits this to be the best plant for horses he has ever grown, he says that he is the first in the region of Bagdad to grow it, and this, notwithstanding the fact that at Kerbella, only a day's journey away, large areas have been planted to it from ancient times. In the especially hot summers the fields are irrigated three times a month; in the cooler summers only twice. From 9 to 10 cuttings are taken each year, and the fields are manured with stable manure after each cutting. The life, i. e., profitable life, of a field of this *djet* is seven years. This variety should be admirably suited to our irrigated lands in California and Arizona, and deserves a trial in comparison with the Turkestan alfalfa. It should also be tested as to alkali resistance." (*Fairchild.*)

8824. PRUNUS sp. **Plum.**

From Kurrachee, India. Received through Messrs. Lathrop and Fairchild (No. 940, February 26, 1902), June 7, 1902.

Kandahar. "A peculiar dried plum sold on the market in Kurrachee and said to have come down from Kandahar. I have never eaten this plum stewed, so do not know of what quality it is. Sent for breeding purposes." (*Fairchild.*)

8825. PRUNUS ARMENIACA. **Apricot.**

From Kurrachee, India. Received through Messrs. Lathrop and Fairchild (No. 938, February 26, 1902), June 7, 1902.

"Dried apricots which were bought on the market in Kurrachee as coming from Kandahar. These apricots, when stewed and served as they are in India, have a really very delicious flavor. There is a bit of disagreeable fiber about the stone, but altogether they struck me as a novelty worthy of attention. Should they prove valuable, cuttings may be obtained by correspondence." (*Fairchild.*)

8826. PRUNUS sp. **Plum.**

From Arabia. Received through Messrs. Lathrop and Fairchild, June 7, 1902.

No data furnished.

8827. PRUNUS sp. **Plum.**

From Bassorah, Arabia. Received through Messrs. Lathrop and Fairchild (No. 865, February 26, 1902), June 7, 1902.

Aluche. "A variety sold on the markets of Bassorah as coming from Persia. A sour variety, which may be useful to breeders." (*Fairchild.*)

8828. ZIZYPHUS JUJUBA. **Jujube.**

From Bassorah, Arabia. Received through Messrs. Lathrop and Fairchild, June 7, 1902.

Samples of a variety similar to No. 8702.

8829 to 8847. FICUS CARICA. **Fig.**

From Italy. Received through Mr. W. T. Swingle (Nos. 101 to 119), June 13, 1902.

"The following collection of caprifig cuttings was obtained during the spring of 1902 at Naples, the classic ground for the study of caprifigs and caprification. Considerable attention was given to the study of the botanical characters of the caprifig trees, and detailed descriptions were drawn up of seven of the principal varieties of caprifigs occurring in this region. It was found possible to draw up a key for the determination of the different varieties of caprifig, based on these characters, which key is given below. It applies only to those of the caprifigs which were carefully studied, but it will doubtless prove useful to investigators who wish to study the caprifigs of Naples. This collection, like that included under numbers 6473 to 6491 and 6773 to 6823, has been introduced to this country in the hope of securing an assortment of caprifigs adapted to all the climatic and soil conditions occurring in California, where all of these caprifigs will be tested as soon as possible. A few varieties of figs are also included in this collection." (*Swingle.*)

KEY TO SEVEN PRINCIPAL VARIETIES OF NEAPOLITAN CAPRIFIGS.

Leaves *nearly entire* or but slightly lobed, small, short, covered with a golden pubescence; middle lobe obtuse and rounded. *Petioles short* and *very stout*, also pubescent. Veins reddish on drying. Profichi ovate with few male flowers; flower pedicels green. No. 8838.

Leaves decidedly lobed, or, if not, nearly smooth.

Leaves *velvety pubescent, petioles short and very stout*, also pubescent. Leaves many (5–7) *lobed.* Middle lobe with obtuse and rounded apex. Veins green on drying. Lamina yellow dotted. Profichi small *oval* with many male flowers. No. 8844.

Leaves not velvety, hairy; profichi ovate.

Petioles very long (reaching beyond sinuses when reflexed). Sinuses very deep and narrow. Middle lobe with rounded apex. Leaf long and narrow with U-shaped base. Veins reddish on drying. No. 8829.

Petioles short or medium in length (not reaching to sinuses if reflexed).

Profichi depressed at apex. Flower *cavity broader than long.* Leaves with *deep and narrow sinuses;* medium sized, regular in outline; 3-lobed, middle lobe with acute straight-sided apex. Lamina decurrent on petiole. Veins drying reddish; flower pedicels purplish. No. 8834.

Sinuses open, usually shallow. Profichi not depressed at apex. Flower cavity longer than broad.

Middle lobe rounded and obtuse. Leaf and petiole moderately hairy. Sinuses shallow and open. Veins drying reddish. Lamina not decurrent. No. 8832.

Middle lobe with acute, straight-sided apex.

Leaves large, irregularly 3–5 lobed. Sinus shallow, usually very open. Lamina decurrent. Veins drying reddish. Flower pedicels purplish. No. 8845.

Leaves medium sized. Lamina not decurrent. Veins green on drying. *Petioles and palmate veins very glabrous.* Flower pedicels green. No. 8837.

8829 to 8847—Continued.

8829.

From Naples. "A medium-sized tree in a garden on Posilipo hill on Strada Nuova di Posilipo, evidently a cultivated sort. It bore a fair number of *mamme;* full of *Blastophagæ* on April 19, and still had a few *mamme* attached on May 14. The *profichi* are abundant. Apparently a valuable late sort. Its botanical characters are as follows: *Petioles very long,* when reflexed reaching beyond base of sinuses. Leaves small, long, and narrow, smoothish, 3-lobed, with deep and narrow sinuses, sometimes closed above. Middle lobe much expanded, with a blunt rounded apex; lateral lobes unusually narrow. Base U-shaped, with decurrent lamina. Veins drying reddish. Petioles very long and slender; slightly hairy. Profichi ovate, medium sized, 45 x 30 mm. Very unlike other sorts in leaf characters. Resembles most No. 8834, but has very much longer petioles, while No. 8834 has acute, straight-sided apex and profichi depressed at tip. No. 8832 has similar U-shaped base, but differs greatly in having shallow sinuses, shorter petioles, and abruptly attached lamina." (*Swingle.*) (No. 101.)

8830.

From Naples. "A large tree in the Botanic Garden, covered with *profichi,* but destitute of *mamme.* The *profichi* were far advanced and had abundant male flowers; but one that had been injured was soft, and this may indicate that this variety has the drawback of producing *profichi* which soften as they ripen. A valuable early sort." (*Swingle.*) (No. 102.)

8831.

From Naples. "A medium-sized tree, evidently of a cultivated sort, in a garden on Posilipo hill, near Villanova. Bore both *mamme* and *profichi.*" (*Swingle.*) (No. 103.)

8832.

From Naples. "A medium-sized tree, of a cultivated sort, in a garden on Posilipo hill. It had a few *mamme* still attached and many *profichi.* Its botanical characters are as follows: *Leaf* U-*shaped with shallow open sinuses and rounded apex.* Leaf medium sized, slightly hairy, 3-lobed, with shallow and rather open sinuses. Base U-shaped, with abruptly joined lamina. Apex of middle segment rounded. Veins slightly reddish on drying. Petiole medium length and not very slender; somewhat hairy. Profichi ovate, 58 x 37, with abundant male flowers. Near to No. 8837, but has a rounded instead of an acute apex and more hairy petioles. See under 8829. Differs from No. 8834 with U-shaped leaves in having open shallow sinuses and rounded apex." (*Swingle.*) (No. 104.)

8833.

From Naples. "A small seedling tree, growing from a wall retaining a roadway on Posilipo hill. Floral envelopes long and nearly hiding the flowers, which were still immature on May 9, 1902. Probably a seedling fig, but possibly a very large caprifig." (*Swingle.*) (No. 105.)

8834.

From Resina, near Naples. "A large tree in Villa Amelia, bearing a few *mamme* and abundant *profichi.* Evidently a cultivated sort. The tree had been caprified with *mamme,* in spite of the presence of a fair number of *mamme* attached to the branches. Its botanical characters are as follows: *Profichi depressed at apex.* Leaves small, rounded, regular in outline, 3-lobed, slightly hairy, with deep, narrow sinuses, often closed. Middle lobe with acute, straight-sided apex. Base U-shaped, with decurrent lamina. Veins drying reddish. Petiole medium or short, slender, slightly hairy. Profichi ovate, depressed at apex, 52 x 36. Some of the flower pedicels purplish. Differs from No. 8845 in smaller leaves, regular in outline, and narrower sinus, and from No. 8837 in having reddish veins on drying and a decurrent lamina. See also under No. 8829, which has longer petioles and rounded tip." (*Swingle.*) (No. 106.)

8829 to 8847—Continued.

8835.

From Resina, near Naples. "A medium-sized tree in Villa Amelia, probably the same as No. 8834." (*Swingle.*) (No. 107.)

8836.

From San Giovanni a Teduccio, near Naples. "A large tree, which had been cut back for grafting; growing in the garden of Dammann & Co. Owing to the presence of only young trees, there were no *mamme*, but a few *profichi* with very long pedicels were seen." (*Swingle.*) (No. 108.)

8837.

From Naples. "A medium-sized tree, evidently of a cultivated sort, growing in a garden on Posilipo hill. Had a few *mamme* and abundant, very large *profichi*, with numerous male flowers. A promising sort. Its botanical characters are as follows: *Petioles almost glabrous.* Leaves medium sized, slightly hairy, 3-lobed, with rather deep and narrow sinuses. Middle lobe narrow below and bulging above, with very acute, straight-sided apex, bulging moderately. Base cordate; lamina not decurrent, broad space between margin and first palmate vein. Veins drying green. Petioles *glabrous*, or nearly so; slender. Profichi very large ovate, 71 x 42, with very many male flowers. Flower pedicels green. Principal palmate vein glabrous. Skin marked with small reddish brown specks. Resembles No. 8834, but has not decurrent lamina and has flower pedicels and veins of dried leaves green, besides petioles which are less hairy. Very like No. 8845, q. v., and No. 8832." (*Swingle.*) (No. 109.)

8838.

From Naples. "A small tree growing in a garden. No *mamme* were seen, but there were numerous medium-sized *profichi*, which had only a few male flowers. Leaves nearly entire, with golden pubescence. Its botanical characters are as follows: *Leaves nearly entire*, small, short, pubescent, with golden hairs, as are the short, thick petioles; sinuses present, shallow and open, not extending one-third way to middle. Middle lobe blunt deltoid, nearly straight-sided, over 90 mm. long. Veins reddish on drying. Base cordate; lamina abruptly attached to petiole. Ultimate veinlets very fine and visible by transmitted light. Profichi ovate, 53 x 30 mm., with few male flowers. Skin with large, nearly white spots. Resembles No. 8844 in pubescence, which is, however, *less* marked, and in having short, stout petioles. No. 8844 differs in having lobed leaves and *oval* small profichi, and yellow spots on dried leaves. Slightly resembles the slightly lobed No. 8832, but has much shallower sinuses, and No. 8832 has rounded middle lobe and longer slender petiole and smoother leaf." (*Swingle.*) (No. 110.)

8839.

From Naples. "A large tree in a garden on the hill between Arenella and Capodimonte. May be a caprifig." (*Swingle.*) (No. 111.)

8840.

From Naples. "A cultivated sort, growing near No. 8831, in garden on Posilipo hill, near Villanova." (*Swingle.*)

8841.

From Naples. "A cultivated sort, growing in garden near No. 8831, on Posilipo hill, near Villanova." (*Swingle.*) (No. 113.)

8842.

From Vico Equense, near Castellamare. "A medium-sized tree, growing in a cliff by the road between Vico Equense and Sejano. It may be a caprifig." (*Swingle.*) (No. 114.)

8829 to 8847—Continued.

8843.

From Naples. "A good-sized tree, evidently of a cultivated sort, on Posilipo hill. Probably a *brebas* tree, i. e., a sort which matures the spring generation corresponding to the profico generation of a caprifig." (*Swingle.*) (No. 115.)

8844.

From Miseno, near Pozzuoli. "*Profico bianco*, white caprifig. A small tree in the garden on the top of Mount Miseno. It had a few *mamme* and some *profichi* which showed a large number of male flowers. Evidently a cultivated sort of value. Its botanical characters are as follows: *Leaves velvety hairy*, petioles thick and short; also velvety pubescent. Leaves medium sized, short and thick, decidedly 3–7-lobed. Sinuses rather open, usually less than one-half way to middle. Leaves (some at least) show numerous small yellowish dots on the upper surface. Apical lobe bluntly deltoid with nearly straight sides. Base strongly cordate. Lamina abruptly attached to midrib. Veins usually drying green. Lateral lobes bulge so sinus line cuts them. Profichi very small (possibly young?) 38 x 33 *oval*, with many male flowers. Skin marked with large, nearly white dots." (*Swingle.*) (No. 116.)

8845.

From Naples. "A large tree of a cultivated sort, growing in a garden on Posilipo hill. It had numerous *profichi* containing many male flowers. A promising caprifig. Its botanical characters are as follows: *Leaves large, irregular in outline, with very open sinuses.* Leaf large, irregular in outline, somewhat hairy; 3–5-lobed sinusés, rather shallow and very open. Lateral lobes very coarsely dentate. Middle lobe thick and bulging but slightly, with an acute straight-sided apex. Base U-shaped or slightly cordate. Lamina decurrent. Veins reddish on drying; palmate veins hairy. Petioles only slightly hairy, rather long and not very slender. Profichi very large, ovate, 62 x 40, with a good number of male flowers; pedicels of flowers purplish at base. Much resembles No. 8837, but differs in having large leaf, more decurrent lamina, and more hairy petioles and veins, and flower pedicels purplish at base. Most resembles No. 8834; differs in large irregular leaf, with more open sinuses and profichi not depressed at apex." (*Swingle.*) (No. 117.)

8846.

From Naples. "A large cultivated fig in a garden on Posilipo hill, bearing a few *brebas.*" (*Swingle.*) (No. 118.)

8847.

From Lago Averno, near Pozzuoli. "A large tree near the road from Arco Filice to Pozzuoli. It was covered with *brebas* figs. A promising sort of early fig." (*Swingle.*) (No. 119.)

8848 to 8886.

From Nice, France. Presented by A. Robertson-Proschowsky. Received June 13, 1902.

A collection of seeds as follows:

8848. AGERATUM MEXICANUM.

8849. AMORPHA FRUTICOSA.

8850. ANTHOLYZA AETHIOPICA.

8851. ARAUJIA SERICIFERA.

8852. ARISTOLOCHIA ELEGANS.

8853. BERBERIS NEPALENSIS.

8848 to 8886—Continued.

8854. CARICA QUERCIFOLIA.

8855. CASSIA CORYMBOSA.

8856. CERATONIA SILIQUA.

"Sweet fruited." (*Proschowsky.*)

8857. CERCIS SILIQUASTRUM.

8858. CORDYLINE BANKSII.

"This may be some hybrid." (*Proschowsky.*)

8859. EUPATORIUM sp.

"It has abundant white flowers in midwinter." (*Proschowsky.*)

8860. EUPATORIUM ATRORUBENS.

"An evergreen bush with very beautiful foliage and flowers in midwinter." (*Proschowsky.*)

8861. EUPATORIUM ATROVIOLACEUM.

8862. FATSIA JAPONICA.

8863. FREYLINIA CESTROIDES.

8864. FRANSERIA ARTEMISIOIDES.

8865. GLAUCIUM FLAVUM.

8866. HEDERA HELIX var. AURANTIA.

8867. HIBISCUS sp.

8868. IPOMOEA FICIFOLIA.

8869. IRIS LAEVIGATA.

8870. MAYTENUS BOARIA.

8871. MELALEUCA VIRIDIFLORA.

8872. OLEA EUROPAEA.

Nice. "Famous for oil. The fruit is very good for preserving in salt solution. The tree is of a very graceful weeping habit." (*Proschowsky.*)

8873. OLEARIA HAASTII.

8874. OREOPANAX PLATANIFOLIUM.

"A very ornamental evergreen." (*Proschowsky.*)

8875. OXALIS CORNICULATA var. ATROPURPUREA.

8876. SALVIA GESNERAEFLORA.

"A very showy winter-blooming shrub. It produces very few seeds." (*Proschowsky.*)

8877. SENECIO DELTOIDES.

8878. SENECIO PETASITES.

8879. SENECIO GRANDIFOLIUS.

8880. SOLANUM PYRACANTHUM.

8881. SOLANUM SODOMAEUM.

8848 to 8886—Continued.

8882. SOLLYA HETEROPHYLLA.

"A twining evergreen shrub with very beautiful blue flowers." (*Proschowsky.*)

8883. SOPHORA JAPONICA.

8884. STERCULIA PLATANIFOLIA.

8885. TACSONIA MOLLISSIMA.

"A very beautiful climbing plant, with large rose-colored flowers and abundant fruits of a pleasant, refreshing flavor." (*Proschowsky.*)

8886. TRIGLOCHIN MARITIMUM.

8887 to 8889.

From Erfurt, Germany. Purchased from Haage & Schmidt. Received June 21, 1902.

Palm seeds as follows:

8887. RHOPALOSTYLIS SAPIDA.

8888. HOWEA BELMOREANA.

8889. HOWEA FORSTERIANA.

8890. ERIOBOTRYA JAPONICA. **Loquat.**

From Tokyo, Japan. Received through Messrs. Lathrop and Fairchild (No. 954, June 2, 1902), June 23, 1902.

Tanaka. "The largest fruited loquat in Japan. This variety originated as a seedling in the yard of Mr. Ioshio Tanaka, at 72 Kinskecho, Tokyo. Mr. Tanaka is a noted Japanese authority on economic botany, and as originator of this remarkably large loquat, his own name has appropriately been given to it. A single fruit has weighed more than 97 grams, while the largest reported in Algiers, Malta, or Spain, so far as I am aware, was only 85, and the largest I have seen was only 56 grams. This is certainly a larger sort than any of these noted African or Spanish varieties. The scions were taken from the original seedling tree in Professor Tanaka's yard in Tokyo, and it is to be hoped can be used for budding. The fruit in formalin, which Professor Tanaka showed me, was egg-shaped, and the largest loquat I have ever seen. Quality is said to be very good. Professor Tanaka delivered an address on this loquat in 1897, at Nagasaki, in which he said the range of weight is between 40 and 80 grams only. The weight of 97 grams was exceptional." (*Fairchild.*)

8891. PANICUM CRUS-GALLI. **Japanese millet.**

From Niuchwang, China. Presented by Hon. Henry B. Miller, United States Consul, through the State Department. Received June 23, 1902.

8892. TRITICUM VULGARE. **Wheat.**

From Moscow, Russia. Received through E. Immer & Son, June 27, 1902.

Romanoff Spring.

8893. NICOTIANA TABACUM. **Tobacco.**

From Sumatra. Received through Messrs. Lathrop and Fairchild (No. 955), July 7, 1902.

Deli. "From one of the best plantations in Deli, East Sumatra. Secured by Mr. Barbour Lathrop personally. See special letter of explanation to Dr. Galloway, June 10, 1902." (*Fairchild.*)

8894. CITRUS BIGARADIA (?) **Bitter orange.**

From Shidzuoka, Japan. Received through Messrs. Lathrop and Fairchild (No. 956, June 16, 1902), July 8, 1902.

Natsu dai-dai. "A flat, broad, summer variety of the Japanese bitter orange, which is a remarkable citrous fruit and deserves the study of citrus growers. It is only of fair quality, but ripens at a time when our pomelos are over, and when the craving for a sour breakfast fruit is perhaps strongest, i. e., in May and June. These scions came from a noted old citrus grower near Shidzuoka, and are a gift to the United States Government. For fuller notes on this fruit see No. 8903. Tanaka gives in his 'Useful Plants of Japan' *Citrus bigaradia* as the species name for *Dai-dai*, but does not identify the *Natsu dai-dai*." (*Fairchild.*)

8895. CITRUS BIGARADIA (?). **Bitter orange.**

From Shidzuoka, Japan. Received through Messrs. Lathrop and Fairchild (No. 957, June 16, 1902), July 8, 1902.

Natsu dai-dai. "A globular formed, slightly different variety of summer bitter orange from No. 8894. Donated by a famous old citrus grower near Shidzuoka, where the government is going to start an experiment station for citrous and other fruits. For a fuller description on this fruit see Nos. 8894 and 8903." (*Fairchild.*)

8896. CITRUS JAPONICA. **Kumquat.**

From Shidzuoka, Japan. Received through Messrs. Lathrop and Fairchild (No. 958), July 8, 1902.

Nimpo. "Scions of one of the best varieties of kumquat in Japan; with large, round fruits. These kumquats, which are small oranges, eaten skin and all, are much more common in China and Japan than in America, and are worthy of being much better known on our markets. Donated by a veteran citrus grower in Shidzuoka." (*Fairchild.*)

8897 to 8899. TRITICUM DURUM. **Wheat.**

From Bombay, India. Received through Messrs. Lathrop and Fairchild (No. 945, April 2, 1902), July 14, 1902.

Three varieties of hard wheat from Ralli Brothers, in Bombay, suited for macaroni making. One sack of each forwarded by Latham & Co., of Bombay.

8897.

Khata. "This variety has been tested in Nag Pur, where it proved the most rust resistant of any kind experimented with. Nag Pur is one of the hottest regions in India, and any wheat which endures the heat of that region will be likely to do well in our desert regions of Arizona and California. This *Khata* is said by Ralli Brothers to be the best of all Indian hard wheats, and whenever they can buy it cheap enough and ship it to Genoa it brings as good a price as the hard Russian wheats. This deserves the serious attention of the hard-wheat experimenters, and may prove superior to the Algerian, Russian, or Spanish varieties for our conditions." (*Fairchild.*) (No. 945a.)

8898.

Khandwa. "This is not so good from the standpoint of such big firms as Ralli Brothers, and it does not have the reputation of being as rust resistant as the *Khata*." (*Fairchild.*) (No. 945b.)

8899.

Pila gheen. "This is not so good from the standpoint of such big firms as Ralli Brothers, and it does not have the reputation of being as rust resistant as the *Khata*." (*Fairchild.*) (No. 945c.)

8900. GLYCINE HISPIDA. **Soy bean.**

From Anjo, Japan. Received through Messrs. Lathrop and Fairchild (No. 963, June 29, 1902), July 24, 1902.

"Twenty-six numbered seeds of a giant soy bean presented to the Department by Mr. K. Obata, director of the Tokai branch agricultural experiment station at Anjo, Japan, on condition that should any of the seeds prove to have inherited the characteristics of its female parent he is to have returned to him a fair quantity of the beans which it produces. All the beans have been numbered, and it is desired especially that a record of each be kept for information. This most exceptional sport from which these beans are taken measured 12½ feet in length and had a stem 1 inch in diameter at the base. It yielded about one-fifth of a gallon of beans, while ordinary plants, I am assured by Mr. Obata, give from 50 to 60 seeds only. Its root system is well developed, but whether unusual it is impossible to say, as it was dug before Mr. Obata saw it. The history of this most remarkable sport is as follows: Mr. J. Miyazaki, a descendant of a Samurai and now a second-hand clothier in the village of Okasaki, found in his small back yard a soy bean which neither he nor his wife had planted purposely, but over which they quarreled, the wife wishing to pull it up because it grew to such unusual proportions and spread over the whole yard. Mr. Miyazaki, however, found in this abnormal plant something to interest him, and when the local district fair was held in Mukada in October he dug up the plant and exhibited it there, but he unfortunately and thoughtlessly ate up most of the beans. Mr. Obata, of the experiment station at Anjo, saw the plant at the fair, visited Mr. Miyazaki's place, and rescued the remaining handful of seed. He got samples of the soil where the plant grew and has sown about 20 seeds in this soil at the experiment station. I have seen and photographed this remarkable sport and think it worthy of the most careful attention." (*Fairchild.*)

8901 and 8901a. PYRUS COMMUNIS. **Pear.**

From Chios Island, Turkey in Asia. Presented by Mr. N. J. Pantelides, through Mr. D. G. Fairchild. Received July 29, 1902.

8901.

Chamogea.

8901a.

Kurania kirakia.

8902. CITRUS NOBILIS. **Mandarin orange.**

From Fukui, Japan. Received through Messrs. Lathrop and Fairchild (No. 959, June 24, 1902), July 21, 1902.

Unshu. "A large-fruited, thick, loose-skinned mandarin orange, which is generally quite seedless but sometimes has one or two seeds. In quality it is not quite so sweet as the common but smaller *Kishu Mikan*, which is the common mandarin orange of Japan. This seedless variety is known all over Japan, but these scions come from the coldest region in which oranges are grown in Japan, where the temperature sometimes goes down to —10° C.—i. e., 14° above zero F.—and where for fifty days or so a foot of snow lies on the ground. In this region, which is a very restricted one, called Sano, near Fukui, ice forms on the rice fields to the thickness of a quarter of an inch. However, the trees are covered by large bamboo mats during December, January, and February, and even with this covering the minimum of last year, 14° above zero, did them material injury. This sort has gradually driven the ordinary seed-bearing mandarin out of the market and is now, since ten years or more ago, the most popular mandarin in Japan." (*Fairchild.*)

8903. CITRUS DECUMANA (?) **Pomelo. (?)**

From Fukui, Japan. Received through Messrs. Lathrop and Fairchild (No. 960, June 24, 1902), July 21, 1902.

Natsu daidai. "Large summer orange. This fruit deserves the attention of all pomelo growers, as it is a variety to be had on the Japanese market *as late as the end of June.* I saw it as early as the close of April, so that the season is two months at least. It is not as fine and juicy as our best pomelo, but is nevertheless at this season eaten with relish by everyone, both European and Japanese. It is served with sugar, as pomelos are served in America, and would pass among all but connoisseurs as a tolerably good pomelo. Further than this, it ranks as one of the hardiest citrous fruits in Japan. These scions came from a tree that was exposed last winter, with a bamboo mat shelter, to a temperature of +14° F., and although it lost some of its leaves it was not killed by the low temperature. A foot of snow covered the ground about this plant for several weeks during the months of January and February." (*Fairchild.*) (See No. 8894.)

8904. CITRUS NOBILIS. **Mandarin orange.**

From Fukui, Japan. Received through Messrs. Lathrop and Fairchild (No. 961, June 24, 1902), July 21, 1902.

Koji. "A small-fruited variety with seeds. It is noted for its hardiness, being cultivated in a region where the thermometer drops to +14° F. and where the plants are surrounded by snow as late as February. It is not an especially fine variety, but is worthy of trial in the variety gardens. See Nos. 8902 and 8903 for further descriptions of climate where it is grown." (*Fairchild.*)

8905. Citrus nobilis. **Mandarin orange.**

From Fukui, Japan. Received through Messrs. Lathrop and Fairchild (No. 962, June 24, 1902), July 21, 1902.

Koji. "This is similar to No. 8904, but is said to bear larger, finer fruits. It was not the season for any of these fruits, so I can not say as to their excellence except from reports." (*Fairchild.*)

8906 to 8909.

From Nice, France. Presented by Mr. A. Robertson-Proschowsky. Received July 31, 1902.

Seeds as follows:

8906. Aristotelia macqui.

8907. Tacsonia mollissima.

"A variety with flowers of a darker color than the type." (*Proschowsky.*)

8908. Tacsonia mollissima.

8909. Olea europaea.

Nice. (See No. 8872.)

8910. Crotalaria juncea. **Sunn hemp.**

From Bombay, India. Received through Dr. S. A. Knapp, July 26, 1902.

8911 and 8912. Oryza sativa. **Rice.**

From Bombay, India. Received through Dr. S. A. Knapp, July 26, 1902.

8913. Prunus armeniaca. **Apricot.**

From Coahuila, Saltillo, Mexico. Received through Miss Lelia Roberts, July 20, 1902.

8914. Ceratonia siliqua. **Carob.**

From Marseille, France. Received through Hon. Robert P. Skinner, United States Consul-General, August 9, 1902.

8915. Voandzeia subterranea. **Woandsu (African goober).**

From Dar-es-Salam, German East Africa. Presented by Mr. D. Holtz. Received August 22, 1902.

8916 to 8975.

From Buenos Ayres, Argentina. Presented by Señor Carlos Thays, director of parks, through Mr. Frank W. Bicknell. Received August 20, 1902.

8916. Opuntia decumana.

8917. Sambucus australis.

8918. Cocos yatay.

8919. Solanum pocote.

8920. Cecropia palmata.

8921. Maytenus boaria.

8922. Psidium guajava.

8923. Enterolobium sp.

8924. Desmodium uncinatum.

8925. Terminalia triflora (?).

8926. Sesbania sanctipaulensis.

8927. Quillaja saponaria.

8916 to 8975—Continued.

8928. Xanthoxylon sp.

8929. Piptadenia cebil.

8930. Lippia turbinata.

8931. Parkinsonia aculeata.

8932. Tipuana speciosa.

8933. Cocos australis.

8934. Gleditsia amorphoides.

8935. Caesalpinia gilliesii.

8936. Bixa orellana.

8937. Eugenia sp.
Anacahuita.

8938. Eugenia mato.

8939. Lithraea aroeirinha.

8940. Enterolobium timboüva.

8941. Dalbergia nigra.

8942. Sapindus trifoliatus.

8943. Schinus molle.

8944. Psidium cattleianum.

8945. Mimosa sensitiva arborea.

8946. Tricuspidaria dependens.

8947. Cestrum pseudo-quina.

8948. Acacia farnesiana.

8949. Colligua jabrasiliensis.

8950. Tecoma stans.

8951. Lucuma neriifolia.

8952. Lippia lycioides.

8953. Ilex paraguayensis.

8954. Bocconia frutescens.

8955. Lantana camara.

8956. Grabowskia glauca.

8957. Eugenia pungens.

8958. Heteropteris umbellata.

8959. Cestrum parqui.

8960. Carica quercifolia.

8961. Opuntia ficus-indica.

8962. Clematis hilarii.

8963. Eugenia michelii.

8964. Copernicia cerifera.

8965. Hibiscus argentinus.

8966. Psidium guajava var. pyriferum.

8967. Chorisia crispiflora.

8968. Morrenia odorata.

8969. Eugenia edulis.

8970. Scutia buxifolia.

8971. Bauhinia candicans.

8972. Celtis tala.

8973. Citharexylum barbinerve.

8974. Acacia moniliformis.

8975. Jacaranda chelonia.

8976. Garcinia mangostana. **Mangosteen.**

From Saigon, Cochin China. Received through Messrs. Lathrop and Fairchild from Mr. M. E. Haffner, director of agriculture of Cochin China, September 3, 1902.

8977 to 9013.

From Aburi, Gold Coast, Africa. Presented by the curator of the Botanic Gardens. Received September 5, 1902.

8977. Abrus precatorius.

8978. Achras sapota.

8979. Adenanthera pavonina.

8980. Anona muricata.

8977 to 9013—Continued.

8981. Anona squamosa.

8982. Arachis hypogaea.

8983. Artocarpus integrifolia.

8984. Bauhinia picta.

8985. Butyrospermum parkii.

8986. Cajanus indicus.

8987. Calotropis gigantea.

8988. Cassia alata.

8989. Chrysophyllum cainito.

8990. Coffea liberica.

8991. Crescentia cujete.

8992. Elaeis guineensis.

8993. Funtumia elastica.

8994. Garcinia hanburyi.

8995. Honckenya ficifolia.

8996. Hura crepitans.

8997. Labramia bojeri.

8998. Leucaena glauca.

8999. Michelia champaca.

9000. Palisota barteri.

9001. Persea gratissima.

9002. Pimenta acris.

9003. Pithecolobium saman.

9004. Poinciana regia.

9005. Raphia vinifera.

9006. Sideroxylon dulcificum.

9007. Spathodea campanulata.

9008. Spondias dulcis.

9009. Spondias lutea.

9010. Theobroma cacao. **Cacao.**

9011. Thevetia nereifolia. **Trumpet flower.**

9012. Thunbergia erecta.

9013. Voandzeia subterranea.

9014. Pyrus malus. **Apple.**

From Saltillo, Mexico. Received through Mr. G. Onderdonk, special agent of the Office of Seed and Plant Introduction, September 9, 1902.

Peron.

9015 and 9016. Prunus armeniaca. **Apricot.**

From Saltillo, Mexico. Received through Mr. G. Onderdonk, special agent, September 9, 1902.

9015.

Perry.

9016.

From a large tree at Chepultepec farm.

9017 to 9019. Citrus decumana. **Pomelo.**

From Bangkok, Siam. Secured by Dr. G. B. McFarland, and imported by Rev. G. R. Callender, at the request of Messrs. Lathrop and Fairchild. Received September 11, 1902.

"A seedless variety, or possibly three different varieties of pomelo, from the garden of Prince Mom Chow Rachawongse, of the lineage of the former Second King. The seedless pomelos, sold on the Hongkong market, which are supposed to be produced by trees of this variety, are the best pomelos in the Orient. The "seedless Bangkok" was the sort requested by us. The circumstances connected with the introduction of these pomelo plants, many months after Messrs. Lathrop and Fairchild visited Siam, were such that it is not possible to say definitely whether one single variety of the "Bangkok seedless" was represented by the three plants brought in, or whether the Prince sent one plant each of three kinds." (*Fairchild.*)

9020. CUCUMIS MELO. **Muskmelon.**

From Valencia, Spain. Presented by Hon. R. M. Bartleman, United States Consul. Received September 20, 1902.

Bronze. One of the finest Spanish varieties.

9021. TRIGONELLA FOENUM-GRAECUM. **Fenugreek.**

From New York. Received through J. M. Thorburn & Co., September 29, 1902.

This seed was grown in southern Germany.

9022. CUCUMIS MELO. **Muskmelon.**

From Valencia, Spain. Presented by Hon. R. M. Bartleman, United States Consul. Received October 2, 1902.

Bronze. (These seeds may be of the same variety as No. 9020, but as they are much lighter in color they have been given a separate number.)

9023. PSIDIUM GUAJAVA. **Guava.**

From Merritt, Fla. Presented by Mr. L. H. Gurney. Received October 6, 1902.

9024. ANONA SQUAMOSA. **Custard apple.**

From Mussoorie, united provinces of Agra and Oudh, India. Presented by Rev. H. Marston Andrews. Received October 6, 1902.

Sharifa or custard apple seed, grown in Dehra Dun, on the south side of a wall. The trees grow to a height of from 15 to 25 feet.

9025. OENOTHERA SINUATA.

From Santa Rosa, Cal. Presented by Mr. Luther Burbank, through Mr. D. G. Fairchild. Received September 30, 1902.

"Mr. Burbank thinks this a valuable ornamental." (*Fairchild.*)

9026. TRIFOLIUM RESUPINATUM. **Strawberry clover.**

From North Australia. Presented by Mr. Luther Burbank, of Santa Rosa, Cal., through Mr. D. G. Fairchild. Received September 30, 1902.

"Found in culture at Mr. Burbank's experimental gardens." (*Fairchild.*)

9027. PYRETHRUM TCHIHATCHEWII.

From Santa Rosa, Cal. Presented by Mr. Luther Burbank, through Mr. D. G. Fairchild. Received September 30, 1902.

"Said to be from Asia Minor. Should be sown in pots and transplanted. Forms a pretty mat of foliage like a lawn, and could be used for lawn purposes." (*Fairchild.*)

9028. MUSA TEXTILIS. **Manila hemp.**

From Manila, P. I. Presented by Mr. John W. Gilmore, of the Insular Bureau of Agriculture, through Mr. L. H. Dewey, Assistant Botanist of the Department of Agriculture. Received October 10, 1902.

9029. PRUNUS CERASUS. **Cherry.**

From Vladimir, Russia. Received through Mr. E. A. Bessey (No. 101, July 22, 1902), October 9, 1902.

Vladimir. "Sun-dried cherries from the garden of Feodor Gontcheroff. These cherries, which will not be picked until about July 31, are from a garden typical as to the method of cultivation (or rather lack of cultivation). The trees are propagated by shoots from the roots regardless of any order. The trees are never pruned nor is the ground ever cultivated. The young shoots are allowed to grow up with the older trees. The result is a dense thicket or jungle, almost impenetrable, of trees from 8 to 12 feet high. In spite of this lack of care the trees bear rather freely. The cherries are usually fully ripe by the 20th of July, but this year being cold only part were ripe. The cherries are black, about five-eighths to three-fourths inch in diameter, with blood-red flesh and juice. They are sweet and juicy, but still retain a pleasant, acid flavor. The general idea that this variety is propagated, as a rule, from seeds is erroneous, that method being used only rarely. However, the variety is said to come fairly true to seed." (*Bessey.*)

9030. PRUNUS CERASUS. **Cherry.**

From Dobrovka, near Vladimir, Russia. Received through Mr. E. A. Bessey (No. 103, July 22, 1902), October 9, 1902.

"From the garden of Vladimir cherries of Makar Kulikoff and Gregori Rezanoff. This tree differs from the others in being exceedingly prolific, the cherries nearly hiding the leaves. The tree is much more vigorous and less inclined to branch at the ground. The leaves are larger and darker green and more coarsely dentate. The leaves are shiny above while those of the neighboring Vladimir cherry trees are dull. The cherries are borne in clusters, those of the Vladimir being usually single or in pairs. They ripen ten days later than the Vladimir, i. e., normally about July 31, and are nearly black when ripe. The flesh is only slightly colored. The cherries are juicy and said to be sweeter than those of the true Vladimir variety. No trees were obtainable. Seeds (in the sun-dried cherries) were obtained in the hope that something valuable may be obtained. This is believed to be a seedling of the true Vladimir." (*Bessey.*)

9031 to 9039.

A miscellaneous collection of exotic plants growing in the Department grounds and greenhouses, which were turned over to the Office of Seed and Plant Introduction for distribution, October, 1902. The origin of most of them is unknown.

9031. JACARANDA CHELONIA.

From Argentina. Seed received May, 1901.

9032. TECTONA GRANDIS. **Teak.**

9033. GRABOWSKIA GLAUCA.

From Argentina. May be a good hedge plant.

9034. SOPHORA JAPONICA. **Pagoda tree.**

9035. RUBUS sp.

From Mexico. Presented by Dr. J. N. Rose (No. 194), assistant curator, U. S. National Museum. "The leaves have a metallic luster, making it a fine ornamental." (*Rose.*)

9036. STERCULIA PLATANIFOLIA.

9037. NUYTSIA FLORIBUNDA.

9038. ALBIZZIA LEBBEK.

9039. INDIGOFERA ANIL.

From Porto Rico. Received October, 1901.

9040. CITRUS AUSTRALICA.

From Botanic Garden, Pisa, Italy. Received through Mr. W. T. Swingle (No. 120), October 16, 1902.

"A small tree, 12 feet high, with abundant foliage; trunk 4 feet high, 6 inches in diameter at base. Tree grows alongside *C. trifoliata* and, like it, seems to stand the cold at Pisa, which sometimes reaches 10° F. in winter and kills pistaches. Fruit is like a lime in Australia, and the species may prove very useful in breeding a hardy lime or lemon, or for a stock." (*Swingle.*)

9041. PHYLLOSTACHYS CASTILLONIS. **Bamboo.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 983, July 28, 1902), November, 1902.

Kimmei-chiku. "Plants of the 'golden' or 'striped' bamboo of Japan. This species has the most decorative culms of any of the Japanese bamboos, being of a golden yellow color striped with green. When young these stems are brilliant in their freshness and a clump of them is a most beautiful sight. This bamboo is said to have been introduced into Japan from Korea. It is by no means a common sort, even in Japan. Owing to the fact that the green stripes fade after the culms are cut, its decorative value is confined to the living stems, especially those one year old. The plant grows to a height of 15 to 16 feet, even occasionally to 39 feet, and the culms attain 10 inches in circumference. If planted in a sheltered place on rich soil which is kept well mulched it will produce in a few years a handsome clump of the golden stems. The leaves are slightly variegated. It is exceedingly variable in the variegations, both of leaf and stem, the green stripes sometimes being scarcely visible. Sprouts appear in June in Japan and are said to be edible, though I have never heard of this variety being grown for food. It is essentially an ornamental plant." (*Fairchild.*)

9042. PHYLLOSTACHYS NIGRA. **Bamboo.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 984, July 28, 1902), November, 1902.

Kuro-chiku, Kurodaké, or *Gomadaké.* "Plants of the Japanese black bamboo. This species is characterized by its dark brown to purple-black culms, which make it one of the handsomest species in Japan. It does not grow much over 20 feet in height, even under the best conditions of soil and climate. The shoots do not turn black until the second year, the first season being green with dark, freckle-like spots. The black bamboo formed at one time a considerable source of revenue to Japan, being largely exported to Europe and America, but of recent years the demand for it has fallen off. The growers say it is because the exporters have shipped immature culms. It is still extensively used for walking sticks, umbrella handles, etc. It grows largest on rich alluvial soil, needs plenty of phosphoric acid and potash, and the ground should be heavily mulched so that it will not dry out." (*Fairchild.*)

9043. PHYLLOSTACHYS HENONIS, var. MADARADAKE. **Bamboo.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 985, July 28, 1902), November, 1902.

Madaradake or *Ummon-chiku.* "Plants of the mottled bamboo from Hakone, province of Omi, arranged for through the assistance of Professor Hirase, a well-known Japanese botanist. This variety is characterized by having distinct blotches (possibly of fungus origin) on its culms. These blotches are of a dark-brown color, sometimes with concentric rings of a darker hue. The mottled culms are especially prized for fancy furniture making, as the mottling is permanent. The plant resembles *Phyllostachys henonis* in growth, and under favorable conditions attains a height of over 15 feet. The blotches on this bamboo do not make their appearance until the third or fourth year, and are more pronounced in the shady parts of the grove. If exposed to bright sunshine it is said the blotches fail to appear. This variety should be given especial attention, not planted in very small clumps, and grown on rich, well-drained soil in locations well sheltered from the wind. It is probably not so hardy as some other sorts and until well established should be protected with a heavy mulch of straw in the winter. The soil should not be allowed to dry out, but should be kept moist by an inch of good mulch during the summer as well." (*Fairchild.*)

9044. PHYLLOSTACHYS BAMBUSOIDES. **Bamboo.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 986, July 29, 1902), November, 1902.

Yadake. "The arrow bamboo, from whose culms the Japanese archers of feudal times had their shafts prepared. The culms are especially suited to this purpose, for they are straight, extremely hard, and of about the proper diameter. The arrows of present-day archers in Japan are also made of this bamboo. The sort was first introduced into England in 1894, Mitford says, and is consequently a comparatively new kind. In Japan it is not so common as many other types, being seen rarely in cultivated ground. It is pronounced hardy in England by Mitford, and a valuable acquisition. In habit it is cespitose, and its clumps are tall and closely set with the culms. Its broad leaves give it a very decorative appearance, individual leaves being as much as 11 inches long by 1¾ inches broad. It is sometimes used as a hedge plant in Japan, and its wood finds uses in the manufacture of tea sieves, baskets, etc. In general appearance it is quite unlike the ordinary bamboos, most of the leaves being borne only on the upper portion of the culms." (*Fairchild.*)

9045. PHYLLOSTACHYS MITIS. **Bamboo.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 987, July 29, 1902), November, 1902.

Moso-chiku or *Mouso-chiku.* "Plants of the edible bamboo of Japan. This variety, which Japanese historians say was introduced into Japan from China a century and a half ago, is not the species best suited for timber purposes, although the largest in size of any of the hardy sorts in Japan. Its culms are sold, it is true, and used in the manufacture of dippers, pots, vases, water troughs, etc., but the wood is softer and more brittle than that of the *Madake,* No. 9046. As a vegetable it is cultivated in small forests near the principal cities, and is given great care. Its young, tender shoots, like giant asparagus shoots, form one of the favorite spring vegetables of all classes in Japan. European and American residents in Japan are, many of them, fond of this vegetable, some even being passionately so. Its cultivation for the purpose of shoot production, therefore, is alone worthy the consideration of truck growers in the extreme South. A market can probably be created for the shoots as soon as a large enough supply can be insured to make the effort worth while. On the other hand, the value of the culms for use in fence making, basket making, and the production of a host of farm and garden conveniences, makes it worth a place in the back yard of every farmer in those regions suited to its growth. It is one of the hardy sorts, and so far as beauty is concerned it is, according to Mitford, 'the noblest of all the bamboos generally cultivated in England.' The severe winter of 1895 in England cut the culms down to the ground, but during that season the thermometer dropped below zero Fahrenheit. Even after this severe freeze the roots remained alive. It is not to be expected that this form will attain so large dimensions in the colder, drier climate of America, but the size of the culms of bamboos depends so much upon the richness of the soil and the methods of culture that, with proper nourishment, there is no reason why large-sized culms, over 2 inches in diameter, should not be produced in America. I have measured a shoot in Japan which was 1 foot 7¾ inches in circumference, and there are records of culms nearly 3 feet in circumference. These large culms were over 40 feet in height. A forest of these large bamboos forms one of the most beautiful sights in the world. In planting for its edible shoots about 120 plants are set out to the acre, but if for forest purposes at least 200 plants should be used. The balls of earth and roots should be more carefully set than those of deciduous trees, as the rhizomes, if injured, stop growing, and the spreading of the plant is checked. The fibrous roots are very brittle after planting and a heavy mulch of straw and loose earth should be kept on the field, so that the surface soil will not dry out. A sheltered situation is essential to the growth of this species, and rich, alluvial soil is what it likes best. Standing water beneath the soil kills it, and much gravel prevents its rapidly spreading. A sufficient number should be planted in a clump to enable the young plants, after a few years, to effectually shade the ground, otherwise, no tall, straight culms will be produced. Judicious thinning out of the small shoots, while still young, tends to make the plant produce larger culms." (*Fairchild.*)

9046. PHYLLOSTACHYS QUILIOI. **Bamboo.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 988, July 29, 1902), November, 1902.

Madake. "This is the great timber-producing bamboo of Japan. It is grown in large plantations or forests near the large cities of Japan, and its culture is said to be among the most profitable of any plant culture in the country. There are extensive wild forests south of Kobe, but the finest culms come from the cultivated forests; these culms are more regular in size and of better shape. The wood of this species is said to be superior in elasticity and durability to either that of the *Moso,* No. 9045, or *Hachiku,* No. 9047. Its extensive uses are too numerous to mention, for they would form a list as long as that of an enumeration of the uses of the white pine in America. The cultivation of this bamboo is not a difficult one, and forests of it should be started in all regions having a suitable climate. The species is one of the hardiest of the large-sized kinds in Japan and thrives in England, proving hardier than *Moso*, No. 9045. It never attains the same dimensions as this species, but often, however, grows to a height of 30 to 40 feet, and culms having a diameter of 2½ to 3 inches are not unusual. Even 4-inch culms are described by the books. The size of these culms depends largely upon the method of culture and how carefully the forests are thinned out and manured. About 300 plants should be set to an acre, in such a way that their spreading rhizomes will not interfere with each other at the start. The soil should be worked over to a depth of 18 inches several months before planting, and if of a heavy clay, should be lightened by working in straw and litter from the barnyard. After planting, the ground should be heavily mulched to prevent the top soil from drying out, and every means should be taken to insure that the ground is soon shaded by the growing shoots. The soil about the bases of the culms should be kept in semiobscurity. This object is only obtained by moderately thick planting and judicious thinning. Small clumps are not so likely to produce large stems as quickly as large patches, for the reason that the soil is more exposed to the drying effect of the sun. Only rich, alluvial, well-drained soil is likely to prove suitable for a bamboo forest of this species. The thickness of the pipes of this sort of bamboo is greater than that of any of the other common kinds, and this characteristic makes the culms more rigid and more serviceable for many purposes. It is of great importance that a young forest of bamboos be protected from the wind, for the young, tender shoots are easily injured. Wind-breaks of conifers are used in Japan even where the winds are anything but severe. A sheltered valley, or the base of a mountain slope, is sometimes chosen as offering such a sheltered situation. In setting young plants out great care should be taken not to injure the buds on the rhizomes or to break off the fibrous roots by packing down the soil too roughly about them. This species is likely to prove the most valuable of any of the Japanese hardy bamboos." (*Fairchild.*)

9047. PHYLLOSTACHYS HENONIS. **Bamboo.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 989, July 29, 1902), November, 1902.

Hachiku. "The second most important timber bamboo of Japan. Its method of culture is exactly similar to that of the *Madake*, No. 9046, and often it is cultivated side by side with this species. The brittleness of its joints, I am told, prevents its being used for many purposes, such as barrel hoops, for which the *Madake* is better adapted. On the other hand, the fine bamboo ribs of Japanese paper lanterns are generally made from this species. The height of this species is little inferior to that of the *Madake*, but it may be easily distinguished from it by the absence of dark spots on the sheath in young shoots. The sheaths are a solid light-straw color. The pseudophyll has a wavy outline. As an ornamental, this species is singled out by Mitford as the most beautiful of all the Japanese bamboos. In hardiness in Japan it ranks about the same as *Phyllostachys quilioi.* Mitford says it is one of the hardiest species in England, retaining its green color through the winter, the leaves not being injured by the cold. It should be given good soil and protection for the first few winters, or until thoroughly established." (*Fairchild.*)

9048. PHYLLOSTACHYS MARLIACEA. **Bamboo.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 990, August, 1902), November, 1902.

Shibo-chiku or *Shiwa-chiku.* "Plants of the wrinkled bamboo, perfectly hardy in England, characterized by having the base of the culm fluted or covered with longitudinal grooves and ridges. The stems of this species are especially prized for use in the woodwork of the special tea-ceremony rooms of old Japanese houses. An uncommon form in England and very decorative. Hard to get in quantity, even in Japan. It should be given the same treatment as that given to *Phyllostachys quilioi.*" (*Fairchild.*)

9049. BAMBUSA QUADRANGULARIS. **Bamboo.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 991, August, 1902), November, 1902.

Shiho-chiku or *Shikaku-daké.* "Plants of the square bamboo. This is not considered as hardy as the previously mentioned species, *Phyllostachys quilioi*, and it will be advisable to give it especial care upon arrival. The plants should be potted and kept in a cool house over winter; not planted out at once. The culms of this species are square only when large. The small culms are round like any other kind. It produces its young shoots in Japan as early as February or March, I am told, and this feature may make it difficult to acclimate. Mitford says its rootstock is very vigorous, and, from clumps which I have seen near Yokohama, I judge it to be capable of producing small forests of culms 20 to 30 feet high. It is a beautiful form and its stems are much used for all classes of ornamental woodwork. It is not, however, very largely cultivated in Japan." (*Fairchild.*)

9050. ARUNDINARIA SIMONI. **Bamboo.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 992, August, 1902), November, 1902.

Narihiradaké. "One of the hardiest and tallest of the Japanese bamboos, perfectly hardy in England, where it is very commonly grown. It is mainly an ornamental and should be planted in small clumps. Its peculiar attraction lies in the large, persistent, or semipersistent sheaths, which do not fall off until the shoots are mature. It spreads rapidly, but for several years the young shoots are likely to be small. In Kew, Mitford says, this species has grown to a height of 18 feet, and I have seen specimens in Japan 20 feet high. It is a very showy form and one which is worthy a place in any collection of bamboos. It is not a forest type, and should be planted in clumps of three or four plants. So far as I know, little use is made of this species in Japan. It should be planted in sheltered locations, in fertile, mellow soil, and given especial care for the first two or three winters." (*Fairchild.*)

9051. PHYLLOSTACHYS RUSCIFOLIA. **Bamboo.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 994, August, 1902), November, 1902.

Bungozasa. "A small species of bamboo, not over 2 feet high. The plants sent are designed for trial along the banks of irrigation canals in California and elsewhere. The species is said to be an excellent sand binder and capable of forming a thick mat of pretty green foliage and an indestructible mass of interwoven roots and rhizomes. Plant 6 feet apart each way on the slopes of the canal bank and give attention until well established. This may prove of considerable value for making the banks of canals permanent. It will probably withstand considerable drought, and it forms a very pretty mat of foliage on slopes or under the shade of conifers in parks. It is not an uncommon species in England, and is also slightly known in America." (*Fairchild.*)

9052. PHYLLOSTACHYS AUREA. **Bamboo.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild. (No. 995, August, 1902), November, 1902.

Hotei-chiku or *Horai-chiku.* "The so-called 'golden' bamboo; a misnomer, as the culms are no more deep yellow in color than those of other sorts. It is distinguished by the short internodes at the base of the culm. It is an ornamental and the species most used for canes and fishing rods. It should be planted in clumps of not less than 15 plants for ornamental effect or for propagation. It is hardier than *Phyllostachys mitis* and probably one of the hardiest species in Japan. The sprouts are said to be of a better flavor than those of the real edible species, though this fact is not commonly known. In England this species grows to a height of 14 feet 6 inches, Mitford says. It is a much smaller species than *P. mitis*, *P. quilioi*, or *P. henonis*, but worthy of a place in every bamboo collection." (*Fairchild.*)

9053. BAMBUSA VEITCHII. **Bamboo.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 997, August, 1902), November, 1902.

Kuma-zasa. "A bamboo eminently suited for planting under conifers on lawns to form a dense mass of foliage. The edges of the leaves in this species die in winter and turn light yellow, giving them a striking landscape effect. Worth trying on embankments of canals in California. Not less than 50 plants should be planted in a place, say, 2 feet apart each way. For the slopes of embankments or roadways it produces remarkably pretty effects. It is used here in Japan very extensively for this purpose, and is also said to be a very good sand binder, but will probably not stand drought or salt water. It spreads very rapidly, but if it threatens to become troublesome by spreading, a ditch 2 feet wide by 2 feet deep, kept open by occasional redigging, will prevent its getting beyond control. A species whose value is in its decorative and sand-binding character. It is said to be quite hardy in England." (*Fairchild.*)

9054. **Bamboo.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 998, August, 1902), November, 1902.

Shakutan. "A broad-leaved species of bamboo which resembles in habit *Bambusa veitchii*, only the stems are much taller and the leaves are larger. It is suited for planting on embankments and under trees on a lawn to form a decorative mass of foliage. It is said to come from the Hokkaido and to be very hardy. It should be planted in lots of ten or more. In the Hokkaido the culms are used for pipe stems and a host of other objects where a small, hard, flinty pipe is desired. I can not find that this is commonly known in Europe under this name, though it comes near Mitford's description of *Bambusa palmata*, which he says is a striking ornamental species and evidently hardy; at least he says nothing to the contrary. It grows to a height of 5 feet." (*Fairchild.*)

9055. BAMBUSA VULGARIS. **Bamboo.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 999, August, 1902), November, 1902.

Taisau-chiku (?). "A tender variety of bamboo for Florida. This species comes from the hottest part of Japan and is the only species of the shipment not hardy. Its wood is said to be useful, though inferior to that of the hardy species. This may prove a different variety from those already in Florida under this specific name. Should be planted in lots of at least five." (*Fairchild.*)

9056. BAMBUSA ALPHONSE KARRI. **Bamboo.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1000, August 9, 1902), November, 1902.

Suwochiku, or *Suochiku.* "A species of striped bamboo which is considered by Mitford as tender in England. It is an exceedingly pretty species and worthy of trial in clumps in Florida and southern California, where it should grow to a height of 10 feet. When young the culms appear in autumn of a purplish color, traversed with green stripes. This should be distributed in lots of at least 10 plants." (*Fairchild.*)

9057. ARUNDINARIA HINDSII. **Bamboo.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1001, August, 1902), November, 1902.

Kanzan-chikú. "A species of bamboo which is commonly grown in clumps near the houses of the peasants in Japan. It forms a very pretty clump from 12 to 17 feet high and, although Mitford says his specimens were cut down to the ground by a severe winter, they grew up again, showing the species is not really tender. Should be tried in Florida, Arizona, or southern California. So far as I know, no use is made of this species except that of broom making." (*Fairchild.*)

9058. ARUNDINARIA HINDSII var. GRAMINEA. **Bamboo.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1010, August, 1902), November, 1902.

Taimin-chiku. "A very decorative, narrow-leaved species of bamboo which is used in Japan for hedges and ornamental clumps. It grows 10 to 12 feet high and forms a dense thicket of slender stems. The foliage is narrow and grasslike and resembles, though it is narrower, that of *Arundinaria hindsii*, No. 9057. It is a very common form and is used for making baskets used in pressing oil from various seeds. It is probably less hardy than other forms like *Phyllostachys quilioi*." (*Fairchild.*)

9059. Solanum tuberosum. **Potato.**

From Callao, Peru. Secured by Mr. Joseph C. Cree, United States vice-consul, October, 1902.

Papas amarillas. One-half bushel of native yellow potatoes.

9060. Myrica faya.

From Fayal, Azores Islands. Presented by Hon. Moyses Benarus, United States consular agent.

This shrub or small tree grows on the sandy shores of these and other subtropical islands.

9061 to 9082.

From Buenos Ayres, Argentina. Presented by Señor Carlos D. Girola, chief of the division of agriculture. Received September 15, 1902.

A collection of seeds, as follows:

9061. Carex darwinii.

9062. Carex decidua.

9063. Carex haematorrhynca.

9064. Carex macloviana.

9065. Carex pseudocyperus.

9066. Jacaranda cuspidifolia.

9067. Libocedrus chilensis.

9068. Schinus dentatus.

9069. Schinus dependens var. patagonica.

9070. Schinus montana.

9071. Tecoma sp.

9072. Aristotelia macqui.

9073. Chorisia insignis.

9074. Cocos australis.

9075. Cocos yatay.

9076. Enterolobium timbouva.

9077. Enterolobium timbouva.

9078. Feijoa sellowiana.

9079. Larrea nitida.

9080. Machaerium fertile.

9081. Prosopis denudans.

9082. Piptadenia macrocarpa.

9083 to 9122.

From Nice, France. Presented by Mr. A. Robertson-Proschowsky. Received October 24, 1902.

A collection of seeds, as follows:

9083. Acacia armata.

9084. Acacia cyanophylla.

9085. Acacia farnesiana.

9086. Albizzia moluccana.

9087. Albizzia odoratissima.

9088. Anchusa italica.

9089. Asystasia bella.

9090. Ceanothus azureus.

9091. Cobaea scandens.

9092. Commelina coelestis.

9093. Coronilla atlantica.

9094. Cuphea ignea.

9095. Cuphea selenoides.

9096. Cupressus sempervirens.

9097. Cyperus papyrus.

9098. Diotis candidissima.

9099. Eriobotrya japonica.

"From large fruits of very good quality." (*Proschowsky.*)

9100. Eryngium agavefolium.

9083 to 9122—Continued.

9101. EUPATORIUM ATRORUBENS.

"Very remarkable leaves and flowers." (*Proschowsky.*)

9102. GENISTA MONOSPERMA.

"A very ornamental bush." (*Proschowsky.*)

9103. IRIS GERMANICA.

Varieties.

9104. IRIS SIBERICA.

Varieties.

9105. KNIPHOFIA ALOIDES var. NOBILIS.

9106. LANTANA RADULA.

9107. LESPEDEZA BICOLOR.

9108. LINARIA SAXATILIS (?).

9109. MALVA SYLVESTRIS.

9110. MARISCUS NATALENSIS.

9111. MELALEUCA LEUCADENDRON.

9112. NOTOCHAETE HAMOSA.

9113. OPUNTIA GYMNOCARPA.

"A very large and ornamental cactus with delicious fruit." (*Proschowsky.*)

9114. OSYRIS ALBA.

9115. PELARGONIUM ZONALE.

Varieties.

9116. PHORMIUM TENAX.

"Foliage variegated, very beautiful." (*Proschowsky.*)

9117. PHYGELIUS CAPENSIS.

9118. PODACHAENIUM PANICULATUM.

"Very ornamental." (*Proschowsky.*)

9119. RIVINA HUMILIS.

9120. SOLANUM ERYTHROCARPUM.

9121. SOLANUM sp.

9122. STERCULIA ACERIFOLIA.

9123 and 9124.

From Paris, France. Received through Vilmorin-Andrieux & Co., November 3, 1902.

9123. OLEA LAURIFOLIA.

9124. OLEA VERRUCOSA.

9125. TRITICUM VULGARE. **Wheat.**

From Kharkof, in the Starobelsk district, Russia. Received through Mr. E. A. Bessey (No. 108, July 25, 1902), November 4, 1902.

Kharkof. "Red, bearded, hard winter wheat from the Starobelsk district of the government of Kharkof. This is similar to the *Kharkof* wheat obtained last year, but from a region where the winters are much drier." (*Bessey.*)

9126. BALSAMORHIZA SAGITTATA.

From Bridges Peak, Mont. Received through Mr. V. K. Chesnut, of this Department, November 5, 1902.

9127 and 9128.

From Santiago, Chile. Presented by Señor Federico Albert, chief of the section of zoological and botanical investigations, department of industries and public works. Received November 12, 1902.

9127. LITHRAEA AROERINHA.

9128. PERSEA LINGUE.

9129. TRITICUM VULGARE. **Wheat.**

From Padi, Saratov government, Russia. Received through Mr. E. A. Bessey (No. 109, July 25, 1902), November 15, 1902.

Winter wheat. "A softish, light-colored wheat, with smooth heads. Said to have been originally grown from the Hungarian Banat, but is somewhat darker colored and harder." (*Bessey.*)

9130. TRITICUM DURUM. **Wheat.**

From Naples, Italy. Received through Messrs. Lathrop and Fairchild (No. 1076). Sample received by mail November 28, 1902; 300 kilos received December 10, 1902.

Saragolla. "Wheat grown in the province of Apulia, along the Adriatic coast of southern Italy. This wheat is esteemed by the producers of the famous Gragnano macaroni as the best in the world for the production of a delicate, fine-flavored product. It has not the strength of the Taganrog varieties, which, owing to the small quantity of native wheat securable, are imported into Italy for semola-making purposes. It has, however, a better flavor, I am told, and the yield of semola from it is greater per weight of grain than from any of the imported hard wheats. It, therefore, sells from 1.25 to 1.75 lire per quintal (100 kilos) higher than imported wheats, which have to pay an import duty as well. Macaroni made from this variety of wheat will not keep as long as that made from Taganrog sorts and is more liable to the attacks of insects, but for quick consumption (three to six months) it is considered superior, and the gourmets of Naples order their macaroni made of the *Saragolla* wheat. The climate of the region about Foggia, where the best of this variety is said to be grown, is one of the driest in Italy—only 18 inches of rainfall in the year—and the soil is said to be stiff but impregnated with lime—i. e., calcareous. This variety deserves the attention of American macaroni-wheat growers. As it comes from a region where the winters are mild, it will probably not prove hardy as a winter wheat north of the thirty-fifth parallel of latitude. The summer temperature of Apulia is high, but not commonly over 100° F. The heavy rains occur in autumn, spring, and winter." (*Fairchild.*)

9131. TRITICUM VULGARE. **Wheat.**

From Dzhizak, a town about 100 miles northwest of Samarcand, on the railroad. Obtained through the Samarcand representatives of Mr. H. W. Dürrschmidt by Mr. E. A. Bessey (No. 118, August 30, 1902). Received December 1, 1902.

Chul bidai (or *bugdai*), meaning *steppe wheat.* "This grain is grown on the Steppes without irrigation. The grains are hard, but it is not *T. durum* (according to Mr. Schifron). This variety yields two harvests a year, for it can be sown as either a winter or spring wheat. If the former, the harvest comes in July; if the latter, the harvest comes in September. If sown in the spring, it is sown just as soon as the snow melts. The spring-sown is the most certain to yield a good crop, for the fall-sown must depend upon the rather uncertain snows. This seed, however, is from the fall-sown seed, being obtained in July. It is selected from over 1,000 poods offered for sale and is remarkably clean and free from foreign seeds for this region." (*Bessey.*)

9132. CITRUS NOBILIS × CITRUS BIGARADIA. **Tangerine.**

From Mustapha, Algiers, Algeria. Presented by Dr. L. Trabut, Government Botanist. Received December 3, 1902.

Clementine.

9133. HORDEUM DISTICHUM NUTANS. **Barley.**

From Fort Atkinson, Wis. Received through Ex-Governor W. D. Hoard, December 5, 1902.

Hanna. Grown from No. 5793.

9134. MUSA TEXTILIS. **Manila hemp.**

From Manila, P. I. Presented by Mr. W. S. Lyon, of the Insular Bureau of Agriculture, to Mr. L. H. Dewey, Assistant Botanist, United States Department of Agriculture. Received December 15, 1902.

9135 to 9146. Opuntia sp. **Tuna.**

From Mexico. Received through Dr. Edward Palmer (Nos. 1 to 12), December 19, 1902.

A collection of seeds as follows:

9135.

Amarillos. "One of the finest of the Mansa forms of tuna and well suited to the use of travelers, being large and containing sufficient water to quench the thirst. Outside it is amber-yellow in color; inside it is decidedly amber or with orange patches. Very productive fruit of this form will be found in the market up to December. The flesh is firm, with the flavor of boiled carrots with a large admixture of sugar." (*Palmer.*) (No. 1.)

9136.

Cardona. "Nine pears of this variety sold in the San Luis Potosi market for 1 cent. It is a small, rich, sweet fruit. The flesh is blotched with maroon and red. The commonest and most useful of all the tunas, yielding a fair supply in December. This fruit is much used in making a summer drink known as 'colonche,' which is largely in use. *Queso de tuna*, tuna cheese, is a round cake made from *Tuna cardo.* The fruit is divested of its jacket and then rubbed through an earthenware strainer and the resulting mass is cooked six hours, then worked (like candy) until all the heat is expelled, and then put into round frames to harden. This is a commercial article all over Mexico. The tuna *Cardona* contains sugar enough to preserve it." (*Palmer.*) (No. 2.)

9137.

Durasnillo Blanco (little white peach tuna). "Sold in the market of San Luis Potosi, 25 for 1 cent. This tuna is eaten entire, not having its rind removed. The seeds are compacted in a wad to resemble a peach stone. It is but a second class fruit. Inside it resembles a white freestone peach, firm, acid-sweet, with water-colored pulp. Its rind is canary-colored outside. I think this tuna would make a good pickle." (*Palmer.*) (No. 3.)

9138.

Durasnillo Colorado, or little red peach tuna. "Sold 25 for 1 cent in the market of San Luis Potosi. The fruit is eaten entire. Fine acid-sweet, much relished by some. Has the flavor of some late freestone peaches. It is rose-colored on the outside and a rose-pink inside (with a fleecy white spot near the base and also at the apex of the fruit). The seeds are compacted inside in a mass to resemble a peach stone. I think this would make a good pickle." (*Palmer.*) (No. 4.)

9139.

Cuejas. "Sold 30 for 1 cent in the market at San Luis Potosi. A remarkably juicy fruit, with a delightful acid taste, which might make it suitable for wine and a fine jelly. The fruit is first dark mauve, then rich maroon, a color fine for wine and jelly. It is considered but a second-class fruit; nevertheless all that come to the market are consumed." (*Palmer.*) (No. 5.)

9140.

Cameosa. "A Mansa form, sold in the market of San Luis Potosi 9 for 1 cent. A fine rich fruit with a watermelon flavor, and very juicy, making it fine for a breakfast fruit. Inside it has white patches intermixed with its mealy, tempting pulp, which is rich reddish crimson in color. The exterior is a pink crimson. This much prized fruit is abundant until the end of October." (*Palmer.*) (No. 6.)

9141.

Mansa Colorado. "Sold in the market of San Luis Potosi 4 for 1 cent. Old fruit is a dark mauve on the outside and bright maroon inside. A juicy, agreeable fruit which might make a good wine. At the base is a white patch, and at the apex under the skin is a circle of rose color. Many consider this equal in quality to any tuna. Disappears from market at the end of October." (*Palmer.*) (No. 7.)

9135 to 9146—Continued.

9142.

Blanca mansa. "Sold in the market of San Luis Potosi in piles of 7 for 1 cent. The fruit is greenish-white outside and a lighter white (with an icy look) inside. An agreeable juicy flavor renders it fine for early meals. It has rather a thin skin, and is one of the choicest tunas. Out of season at end of October." (*Palmer.*) (No. 8.)

9143.

Toconostle. "Fruit resembling a peach, with seed compacted in the center to represent the stone. The outside is a soft green when the fruit is young and of a salmon color when it is older. The flesh is solid and has an acid taste. Marmalade is made of it by removing the rind and seed core, boiling in water to remove the sourness, and cooking in sugar in the usual manner for marmalade. The fruit is also eaten chopped up and fried. Good pickles are said to be made of it. It is also cut into pieces and put into soups or boiled with vegetables and meats, and can be preserved in the ordinary way. It is also candied to represent white Smyrna figs, being first boiled in water (after the seeds have been removed from the apex) and then in sugar the usual way for candied fruit." (*Palmer.*) (No. 9.)

9144.

Chavaña. "Sold 10 for 1 cent in the market of San Luis Potosi. The fruit is a dark-mauve color outside and lighter colored inside. The rind is rather thick. The fleshy parts represent lines of white circles, which contain the seeds, and between which are lines of light mauve pulp. The core is decidedly white. The flesh has a rich, sweet, juicy taste like no other tuna; may be nearest to a rich, juicy apple. This is a wild variety. Can be used for preserves and marmalade. It seems to be next to *Cardona* in the amount of sugar it contains." (*Palmer.*) (No. 10.)

9145.

Castilla Colorado. "In the market of San Luis Potosi 10 of these large, magnificent fruits can be bought for 1 cent. Purple-mauve on the outside, rich crimson inside, but the two ends of the fruit are inclined to be carmine at first, but in the fully mature fruit of a rich claret hue. The juice might pass for claret wine. One of the largest, showiest, and richest flavored, and perhaps equal in flavor to the richest pear. It is one of the rarest tunas, and is soon out of the market." (*Palmer.*) (No. 11.)

9146.

Blanca Castalina. "Four sold in the market of San Luis Potosi for 1 cent. Yellow-white on the outside, but of an icy whiteness inside. Flesh solid, not as moist as some of the *Mansas*, and with a very agreeable watermelon taste. It is large, and has a rather thin skin. There seems to be considerable sugar in the fruit. Abundant in the market until the end of October, when it begins to disappear." (*Palmer.*) (No. 12.)

9147 to 9160. PHASEOLUS sp. **Bean.**

From San Luis Potosi, Mexico. Received through Dr. Edward Palmer, December 19, 1902.

A collection of selected "frijoles" as follows:

9147.

Amarillo. "A third-class bean, said to be of good flavor. For trial in New Mexico, Arizona, and southern California." (*Palmer.*)

9148.

Ballo. "A first-class bean, the leader in quality, and greatly admired, particularly by the rich. It is a good producer, fair sized, and light in color, which latter quality should warrant its trial in the United States. It should be tried in New Mexico, Arizona, and southern California." (*Palmer.*)

9147 to 9160—Continued.

9149.

Berendo. "A second-class bean; not without merit, however, as it has a large number of purchasers. When the beans are old they are much darker than when new. Plant just before a rain. For trial in New Mexico, Arizona, and southern California." (*Palmer.*)

9150.

Blanco bolador. "A third-class bean, but may improve with cultivation. Only two lots were seen on the markets. It is generally eaten when no better bean can be had. After being boiled it is sometimes fried in lard. It resembles our lima bean. It should be tried in New Mexico, Arizona, and southern California." (*Palmer.*)

9151.

Borado. "Rated as a second-class bean, though it is good when fried. It has many purchasers. The variations shown in the piles in the market prove that it crosses freely. For trial in New Mexico, Arizona, and southern California." (*Palmer.*)

9152.

Blanco. "A third-class bean which does not seem to be a favorite. It closely resembles the white bean of the United States, and I refused to eat it if any colored beans were on hand. Grows with a small amount of water. For trial in New Mexico, Arizona, and southern California." (*Palmer.*)

9153.

Ballo almo halla (*Cacaguate*, peanut bean). "This bean resembles the kernel of a peanut. It is a first-class bean, relished by many for its flavor, and as it is of a light color may be a good one to cultivate. Try in New Mexico, Arizona, and southern California." (*Palmer.*)

9154.

Color de Rosa. "A second-class bean, and yet there are many who prefer it. It seems to cross freely, judging from the 'half castes' in the piles of beans on the market. Should be tried in New Mexico, Arizona, and southern California." (*Palmer.*)

9155.

Garbansillo. "A first-class bean preferred by many, as it has a rich flavor. It is white, and on that account might claim recognition by those who like no other color, however high the quality. It grows freely on the table-lands of Mexico, and therefore might grow upon our plains and surpass our white bean in quality and productiveness. Should succeed in Utah." (*Palmer.*)

9156.

Grullito. "A first-class bean in every respect, and has only the *Ballo* as a rival according to most people. It is said to yield bountifully. It should be tried in New Mexico, Arizona, and southern California." (*Palmer.*)

9157.

Gruyo. "A second-class bean which seems to be a good producer. For trial in New Mexico, Arizona, and southern California." (*Palmer.*)

9158.

Guevo de Vieja. "A second-class bean, not abundant in the market. For trial in New Mexico, Arizona, and southern California." (*Palmer.*)

9159.

Negro. "Rated as a third-class bean. It is grown only in the tropics, where no other bean thrives well. There it is appreciated. This sample came from Veracruz and was the purest in the market, either as regards adulteration or crossing. As a personal choice for permanent food, I should select this bean, as it has a satisfying quality to it. For trial in southern part of Florida." (*Palmer.*)

9147 to 9160—Continued.

9160.

Siguino. "A second-class bean, used a great deal. For trial in New Mexico, Arizona, and southern California." (*Palmer.*)

9161. PYRUS LONGIPES.

From Mustapha, Algiers, Algeria. Presented by Dr. L. Trabut, Government Botanist. Received December 23, 1902.

9162. EDGEWORTHIA GARDNERI. **Paper plant.**

From Shizuoka, Japan. Received through Messrs. Lathrop and Fairchild (No. 1008, August, 1902), January 6, 1903.

Mitsumata. "The paper plant, from which some of the finest Japanese paper is made. This fine paper is imported in large and increasing quantities into America, where it is used for legal paper, stocks and bonds, deeds, diplomas, etc. This plant requires especial attention, and a bulletin on its culture has appeared—B. P. I. Bulletin No. 42. In Japan the seeds are kept in bags of palm sheath fiber in a shallow hole in the floor of a house or shed, which is covered with boards to keep it dark. In planting in the spring, sow in rows in rich garden soil, and when several inches high transplant to nursery rows, and cultivate until large enough to plant out in permanent locations. It may, however, be planted out when only 8 to 9 inches high. The plant is semihardy, but is often given protection, even in Japan. A frost of 6 or more degrees will not kill it, as it is a deciduous plant. It seems to adapt itself to a variety of soils, and I believe it can be grown in arid regions by irrigation; at least it is worthy of trial in them. The paper pulp yielded by the bark is four times as valuable as ordinary wood pulp in Japan, and makes a quality of paper which for many uses is immeasurably superior to our wood pulp or even rag papers. This whole question of producing a bast paper in America is one worthy the serious consideration of our cultivators in the South. In Japan the cultivation of this species is increasing rapidly, I am told, and the consumption by foreigners of these fine *Mitsumata* papers is larger every year. The attempt to find out where the plant will grow should be made by the distribution of small potted plants rather than of seeds, and one of the main objects of this first importation of seeds is to discover how far north the plant will prove hardy. The bush grows about 6 feet high, is decorative, and is sometimes planted for its pretty yellow flowers." (*Fairchild.*)

9163. EDGEWORTHIA GARDNERI. **Paper plant.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1011, August, 1902), January 6, 1903, and February 28, 1903.

(See No. 9162 for description.)

9164. MYRICA NAGI.

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1009, August, 1902), January 6, 1903.

Yama momo. "Plants of the best variety of this fruit species. (See No. 9314.) The best kind, i. e., that producing the largest fruit, has serrated leaves, I am informed. Entire leaved forms produce smaller, scarcely edible fruits. This is a very slow-growing tree, which will not produce fruit for six or seven years. Possibly a few fruits will be produced in four years from these trees." (*Fairchild.*)

9165. WICKSTROEMIA CANESCENS. **Paper plant.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1012, August, 1902), January 6, 1903.

Gampi. "A species of tree from which the noted *Gampi* paper is made. This plant has never been cultivated in Japan, but grows wild in the mountains of the provinces of Yamato, Ise, Mino, etc. The demand for the bark is so great that the plant is being killed out. The paper made from its bark is the toughest, finest, silkiest paper in the world, and is used for the manufacture of letter press-copying books, etc. In America many of these Japanese letter books are in use, and the export of this *Gampi* paper is an important one for Japan. The plant will probably do best in the mountains of the South, and the young plants should be distributed to such persons as can give them a trial by setting them out, a few in a place, to ascertain how hardy the species is. The plant is easily propagated by root cuttings, and this method should be used to secure a small forest of it. The species runs readily by means of shoots from the root, and trees 2 inches in diameter were not unusual before the big demand set up for this delicate *Gampi* paper. Now it is difficult, it is said, to find trees of more than a few feet in height. If this species can be brought into forest cultivation it will add to the market a paper pulp of the greatest value." (*Fairchild.*)

9166. ARALIA CORDATA. **Udo.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1013, August, 1902), February 28, 1903.

Kan Udo. "Seed of a new salad plant called *Udo.* This is described in B. P. I. Bulletin No. 42. It is a delicate, new salad which should find a most acceptable place on the tables of well-to-do Americans, for it comes into season in October and November. It is as crisp as celery, and has a refreshing flavor quite its own." (*Fairchild.*)

9167. ARALIA CORDATA. **Udo.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1014, August, 1902), January 6, 1903.

Kan Udo. "Roots of the same variety of *Udo* as No. 9166. For description see B. P. I. Bulletin No. 42. This variety should be given a different treatment from that given to No. 9168, *Moyashi Udo.*" (*Fairchild.*)

9168. ARALIA CORDATA. **Udo.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1016, August, 1902), January 6, 1903.

Moyashi Udo. "Young roots of the forcing *Udo*, a new salad plant of great promise. These roots should be kept packed in straw, where they will not dry out nor mold, in a cool storage place until next spring, when they should be planted out in rows 2 by 3 feet apart, and cultivated all summer as potatoes are cultivated. In the autumn, after the leaves die, the old roots are dug and packed closely together in the bottom of a trench 2 feet deep, and covered with leaf-mold and rich loam to force them into growth. The blanched shoots, 2–3 feet long and as big as a man's thumb, are as tender as celery, and make a delicious salad if shaved and served with a French dressing. This forcing variety is likely to be useful throughout the South. See B. P. I. Bulletin No. 42." (*Fairchild.*)

9169. ARALIA CORDATA. **Udo.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1016a, August, 1902), January 6, 1903.

Moyashi Udo. "Old roots, which should be planted out next spring in rows 2 by 3 feet apart, cultivated all the season, and next winter forced by burying in a trench, as has been described for No. 9168. These old roots will produce good-sized shoots the first winter's forcing, while young roots will produce only a few small ones." (*Fairchild.*)

9170 to 9199. PRUNUS PSEUDO-CERASUS var. HORTENSIS. **Flowering cherries.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1017, August, 1902), January 6, 1903.

"A collection of the different varieties of flowering cherries from a noted grower in Tokyo—Mr. Takagi. There are hundreds of slightly different sorts of this flowering cherry, which is, as is well known, the favorite flower of the Japanese. It is inconceivable that Europeans and Americans have not followed the example of this race of flower lovers and planted long avenues or whole hillsides with this superbly beautiful plant. As an avenue tree in summer, the cherry would not be a success except when mingled with some other sort, but its beauty during the spring months warrants its being planted in big masses in our large parks instead of as single, isolated trees. The beauty of the cherry trees of Japan lies in the fact that there are miles of them or acres of them in bloom at once. Great care should be taken to keep the names of the varieties straight, to enable other plants to be ordered if desired later. These flowering cherries can be grafted on our wild cherry or on any good cherry stock. Single, double, and weeping sorts are included in this shipment. A list follows." (*Fairchild.*)

9170.

Nara Sakura.

9171.

Oshiogun.

9172.

Chioshiu hisakura.

9173.

Oyama fugin.

9174.

Yokihi.

9175.

Kuramayama.

9176.

Ito Kukuri.

9177.

Surugadai nioi.

9178.

Ogasa yama.

9179.

Gozanoma.

9180.

Ichio.

9181.

Daijen.

9182.

Botun sakura

9183.

Ochiochin.

9184.

Omanogawa.

9185.

Horinshi.

9186.

Amayadori.

9187.

Yedosakura.

9188.

Ouchisakura.

9189.

Shiogama.

9190.

Higurashi.

9191.

Bauriko.

9192.

Rui arashi.

9193.

Tamamari.

9194.

Ukon.

9195.

Kangosan.

9196.

Murasaki sakura.

9197.

Gayeakehono.

9198.

Shirofugin.

9199.

Sikigan.

9200. Prunus mume. **Japanese plum.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1018, August, 1902), January 6, 1903.

Rinshiu. "The favorite variety used for stocks by the Japanese nurserymen. This is worthy of trial as a vigorous, resistant stock upon which to bud both European and American varieties of plum. It should be tried by nurserymen interested in the question of the influence of the stock on the scion. The fruit of the Japanese apricot is used principally for pickling purposes. The trees are unusually vigorous growers, heavy bearers, and are considered the best commercial plum trees of the *Ume* class in the nursery region of Ikeda, Japan." (*Fairchild.*)

9201. PRUNUS TOMENTOSA. **Japanese cherry.**

From Tokyo, Japan. Received through Messrs. Lathrop and Fairchild (No. 1015, August, 1902), February 28, 1903.

"A decorative cherry with fruits the size of a large pea and sessile, or nearly so, on the long, slender branches. The fruits are edible, but not of good quality. For breeders and as an ornamental species. The fruits have a considerable amount of pulp on them and are much more delicate than those of the American choke cherry." (*Fairchild.*)

9202 to 9210. PRUNUS TRIFLORA. **Japanese plum.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1019, August, 1902), January 6, 1903.

"Fruiting plums of the *Hatankyo* class. Great confusion exists in the nomenclature of these Japanese plums. The *Hatankyo* class is often confused with the *Botankyo*. The early ripening sorts are sometimes called *Hatankyo*; the late ripening kinds *Botankyo*. They are the largest of the true plums of Japan, and have a smooth skin like the European species. Said to be shy bearers and not as profitable for commercial purposes as the *Sumomo* class of small-sized, thin-skinned, soft-fleshed fruit. These *Hatankyos* or *Hatankios* are somewhat like the *Burbank* and *Wickson* in type. They are hard fleshed, and make the best stewed plums I have ever eaten. A list of the varieties follows." (*Fairchild.*) (See also Nos. 9222 and 9223.)

9202.

Okutsno.

9203.

Furugiya.

9204.

Nakatesumomo.

9205.

Hachioji.

9206.

Suikamomo.

9207.

Ohatankyo.

9208.

Ringotane.

9209.

Hakubotan.

9210.

Benibotan.

9211 to 9216. PRUNUS MUME. **Japanese plum.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1020, August, 1902), January 6, 1903.

"One-year-old plants of the *Ume* class of Japanese plums. These are quite different from European and American plum varieties, having a short but distinct pubescence. The fruit is exceedingly sour and is not designed for table use, except in the form of pickles. These pickles are the sourest things I have ever tasted, and are consumed in large quantities in Japan, being pickled with the leaves of a labiate, *Perilla arguta*, which give the plums a reddish color and aromatic taste. They are not much relished by Europeans, because of their intensely sour flavor. This class of plums is well known in America among breeders, but a collection of the different varieties will doubtless be acceptable for purposes of comparison. It is more like the apricot plum than anything else." (*Fairchild.*)

9217 to 9220. AMYGDALUS PERSICA. **Japanese peach.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1021, August, 1902), January 6, 1903.

"A collection of one-year-old plants of Japanese peach varieties. There are a number of distinct varieties of these Japanese peaches, and some are fairly sweet and many are unusually juicy. It is not possible for me to say how recently these sorts may have been introduced into Japan from China. A list of the varieties follows." (*Fairchild.*)

9217.

Hanbei.

9218.

Nasehi maru.

9219.

Kintoki.

9220.

Mizumito.

9221. AMYGDALUS PERSICA. **Nectarine.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1022, August, 1902), January 6, 1903.

Chosen or Korean nectarine. "A freestone variety, with smooth, almost greasy skin, which is sold everywhere in the markets in July in Japan. It is a juicy, white-fleshed sort, bitter near the stone, but with a decided and agreeable peach flavor." (*Fairchild.*)

9222 and 9223. PRUNUS TRIFLORA. **Japanese plum.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1019, August, 1902), January 6, 1903.

(These two varieties were incorrectly labeled "L. & F., No. 1017," and packed with that lot.) (See Nos. 9202 to 9210.)

9222.

Kowase.

9223.

Yome momo.

9224. ARALIA CORDATA. **Udo.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1016, August, 1902), January 6, 1903.

Moyashi udo. A new salad plant of great promise. (See No. 9168.)

9225. VICIA GEMELLA.

From Yokohama, Japan. Secured by Messrs. Lathrop and Fairchild (not numbered) through the Yokohama Nursery Company. Received February 28, 1903.

9226. LAGENARIA sp. **Gourd.**

From Yokohama, Japan. Presented by the Yokohama Nursery Company. Packed with seeds secured by Messrs. Lathrop and Fairchild. Received February 28, 1903.

Kanpio gourd.

9227. PUERARIA THUNBERGIANA. **Kudzu.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1023, August, 1902), February 28, 1903.

Kudzu. "This broad-leaved, perennial, leguminous climber is well known in America, being often seen in private gardens where it is used as an arbor plant or to produce tropical effects by allowing it to grow over the tops of bushes or low-growing trees. For this purpose alone it is a valuable plant. In Japan the fleshy roots are used for starch making and the foliage is cut and fed to cattle for fodder. Whole hillsides are sometimes covered with this plant in Japan, where it grows wild, and in these regions its foliage is utilized for fodder purposes and a fine quality of starch is made from its roots. It should be tested as a fodder-producing plant in waste places. The seed should be sown in a seed bed and the young plants set out in rich soil. I am told it does not withstand much drought." (*Fairchild.*)

9228. PUERARIA THUNBERGIANA. **Kudzu.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1024, August, 1902), January 6, 1903.

"*Kudzu* roots for trial as a fodder plant. These roots should be planted in a single plat about 5 feet apart each way and the vines allowed to grow over the ground in all directions. It is possible that by repeatedly cutting the shoots back before they are too tough a continuous supply of fodder may be secured. The plant is a leguminous one and may be of service for breeders." (*Fairchild.*)

9229. MEDICAGO DENTICULATA.

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1025, August, 1902), January 6, 1903.

Uma goyashi. "A biennial wild-fodder *Medicago* with yellow flowers, which grows 2 feet in height. Its stems are said to be highly relished by horses, which eat them greedily in the spring. So far as I have observed the plant is not cultivated." (*Fairchild.*)

9230. LESPEDEZA BUERGERI.

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1026, August, 1902), February 28, 1903.

No Hagi. "The species of *Hagi* in Japan are especially prized for ornamental purposes and their summer and autumn flowers are used extensively for decoration. This species, the *No Hagi*, is said to be a good fodder plant, but how it is used I have been unable to discover. It is a low, bushy, hardy perennial." (*Fairchild.*)

9231. JUGLANS REGIA. **Walnut.**

From Shanghai, China. Received through Messrs. Lathrop and Fairchild (No. 953, May 10, 1902), January 6, 1903.

"A variety of walnut bought on the market in Shanghai. This variety is said to be eaten all the year round by the Chinese. I could not find from which province it came." (*Fairchild.*)

9232. JUGLANS REGIA. **Walnut.**

From Hongkong, China. Received through Messrs. Lathrop and Fairchild, January 6, 1903.

These few nuts are from a lot secured by Mr. H. Suzuki, of the Yokohama Nursery Company, Yokohama, Japan, and may be slightly different from No. 9231.

9233. PRUNUS TRIFLORA. **Japanese plum.**

From Ikeda, Japan. Received through Messrs. Lathrop and Fairchild (No. 968), January 6, 1903.

Hatankyo. "A special sort of this common variety of plum. This fruit has a decided red blush upon it and is not of that translucent yellow which is said to characterize the sort in other parts of Japan. In flavor it leaves a good deal to be desired." (*Fairchild.*)

9234. THERMOPSIS FABACEA.

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1030), from the Yokohama Nursery Company. Received February 28, 1903.

Sendai Hagi. "Seed of this yellow flowered variety, 1 foot high, perennial, said to be very showy." (*Fairchild.*)

9235. PRUNUS TRIFLORA? **Japanese plum.**

From Ikeda, Japan. Received through Messrs. Lathrop and Fairchild (No. 969), January 6, 1903.

Guanji. "A small fruited sort, 1 inch in diameter, bought in the orchard. Though differing little from No. 9236, it seems well to keep them apart. This is a vinous flavored variety, flattened in shape, with thin, sour skin, rich flavored flesh, and altogether the most delicate plum I have eaten in Japan, though not to be compared with a good variety of *Prunus domestica*. It is said to be the best paying plum in Ikeda, the plum-growing center of Japan." (*Fairchild.*)

9236. PRUNUS TRIFLORA? **Japanese plum.**

From Ikeda, Japan. Received through Messrs. Lathrop and Fairchild (No. 970, July 5, 1902), January 6, 1903.

Guanji. "Seeds bought on the market. This is essentially the same as No. 9235, though the fruit is somewhat larger and not quite so sweet. It is evidently one of the principal market plums, for one sees it everywhere, whether under this or some other name." (*Fairchild.*)

9237. VICIA HIRSUTA.

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1033, August, 1902), February 28, 1903.

Suzumeno yendo. "A leguminous plant worthy of investigation as a possible fodder plant or for breeding experiments, as it is said to be occasionally used in Japan for fodder. I was unable to see this species growing." (*Fairchild.*)

9238. DESMODIUM PODOCARPUM var. JAPONICUM.

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1034, August, 1902), February 28, 1903.

Nusubito Hagi. "A species of Leguminosæ of possible use in breeding experiments with leguminous fodder plants. I did not see the plant growing." (*Fairchild.*)

9239 to 9243. PYRUS SINENSIS. **Japanese pear.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1035, August, 1902), January 6, 1903.

"This collection will include, according to contract, some sorts which keep until July and even longer, and some very large-fruited kinds, which originated in the north of Japan. I have eaten many varieties of pear in Japan and, while none are as good as our pears, they are, nevertheless, refreshing fruits. I believe they should be advertised as a fruit for poor people, since the trees are heavy bearers and the fruit will keep well. In Japan nearly all the trees seen were trained upon overhead trellises, and it seems to be the popular idea that they will not bear well unless so trained. The selection of these varieties has been left to Mr. H. Suzuki, of the Yokohama Nursery Company, whose friend at Kawasaki is a specialist in Japan pears. A list follows." (*Fairchild.*)

9239.

Waseaka.

9240.

Ofurugawa.

9241. (Label missing.)

9242.

Tai haka.

9243.

Chiojuro.

9244 to 9247. ERIOBOTRYA JAPONICA. **Loquat.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1036, August, 1902), January 6, 1903.

Japanese loquats, called *Biwas* in Japan, as follows:

9244.

Tanaka. (See No. 8890.)

9245.

Long fruit.

9246.

Variegated.

9247.

Maruni.

9248 to 9267. NELUMBIUM SPECIOSUM. **Lotus.**

From Tokyo, Japan. Received through Messrs. Lathrop and Fairchild (No. 1039, August, 1902), January 6, 1903.

"A collection of pot lotuses for cultivation under water in large shallow pots of 2 feet in diameter and a foot deep. These plants are from a noted lotus grower in Tokyo, who claims to have hundreds of varieties and whose lotus show in late August is said to be unusually fine. The rhizomes of these pot lotuses are kept in a cool place over winter and in spring set out in 6 to 8 inches of rich mud at the bottom of the pots, which are kept filled to within an inch of the brim with water. The second year these rhizomes should bloom and produce a beautiful show of flowers. Judging from water-color sketches, which I saw in the Tokyo Botanic Gardens, the variety of form and color among these lotuses must be something quite unusual. All shades of pink, yellow, and green, and many variegated forms were represented. The pots should never be allowed to dry out, but the mud must be kept continually covered with water. The varieties are as follows." (*Fairchild.*)

9248.

Inazuma.

9249.

Shiro Shakuyaku.

9250.

Beni botan.

9251.

Sakuralen.

9252.

Kayo.

9253.

Tokalen.

9254.

Kinshi.

9255.

Nishikilen.

9256.

Mangitsu.

9257.

Itten kobai.

9258.

Tenjiku len.

9259.

Hakubotan.

9260.

Usuyo.

9261.

Shokan.

9262.

Giosan.

9263.

Nankin kuchibin.

9264.

Ashimaru.

9265.

Myiyo.

9266.

Beni Tinshi.

9267.

Tamausagi.

9268. CITRUS BIGARADIA? **Bitter orange.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1040, August, 1902), January 6, 1903.

Natsu Mikan or *Natsu Shiro.* "An especially fine variety of the bitter orange. This is a remarkable fruit and worthy the serious attention of citrus growers. It is not of such fine flavor as our pomelo, but still is sufficiently palatable to serve the same purpose, and it matures at a different time of the year. *This fruit is common on the market from April until the middle of August* in Japan and, although in August it is a poor fruit, it still serves very well as a morning appetizer. This is the commonest, often the only citrous fruit to be seen on the Japanese markets in July, and I judge the number of tons consumed every year is very large. The tree is said to be a vigorous-growing one and a good bearer. This variety is also one of the hardiest citrus sorts in Japan, withstanding a temperature of + 12° F. on the west coast of the main island. An important point in the culture of this variety is to leave the fruit hanging as long a time as possible on the trees, not picking it green and allowing it to ripen." (*Fairchild.*)

9269. CITRUS DECUMANA. **Pomelo.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1041, August, 1902), January 6, 1903.

Asa hikan. "I understand this is a summer-ripening pomelo." (*Fairchild.*)

9270. PRUNUS TRIFLORA. **Japanese plum.**

From Ikeda, Japan. Received through Messrs. Lathrop and Fairchild (No. 971, July 5, 1902), January 6, 1903.

Obeni. "A flattened variety, looking much like a large *Guanji* (see No. 9236), though lacking its flavor. The skin and flesh are intensely sour even when nearly ripe. Never sweet enough to be good eating. These fruits were bought on the market." (*Fairchild.*)

9271. CITRUS NOBILIS. **Mandarin orange.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1043, August, 1902), January 6, 1903.

Unshu or *Unshiu Mikan.* "This is the best Japanese mandarin orange. It is said to be quite seedless and very juicy. I do not believe it is the equal of our best mandarin oranges, but its seedless character makes it valuable. It is grown extensively all over middle Japan, especially in the Province of Kii. It is already known in America." (*Fairchild.*)

9272. CITRUS DECUMANA. **Pomelo.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1044, August, 1902), January 6, 1903.

Aya buntan. "A red-fleshed variety of pomelo which is eaten with great relish by the Japanese. It is doubtless inferior in flavor to our best pomelos, but its red flesh is a character of value." (*Fairchild.*)

9273. PRUNUS TRIFLORA. **Japanese plum.**

From Ikeda, Japan. Received through Messrs. Lathrop and Fairchild (No. 972, July 5, 1902), January 6, 1903.

Obeni. "These fruits came direct from orchard trees which are noted for producing especially fine fruits. They were certainly much larger and finer than those bought on the market, and I believe this is a different strain from No. 9270." (*Fairchild.*)

9274 and 9275. CITRUS JAPONICA. **Kumquat.**

Received through Messrs. Lathrop and Fairchild (Nos. 1046 and 1047, August, 1902), January 6, 1903.

Nagami-kinkan. "Two varieties of these kumquats were ordered, but the Yokohama Nursery Company sent only the one sort marked *Nagami-kinkan*, which is said to be an elliptical or obovate fruited kind." (*Fairchild.*)

9276. MYRICA FAYA.

From Madeira. Presented by Mr. J. B. Blandy, of Funchal. Received February 21, 1903.

9277. CELTIS SINENSIS.

From Yokohama, Japan, Received through Messrs. Lathrop and Fairchild (No. 1049, August, 1902), February 28, 1903.

"One of the prettiest shade trees in Japan, suitable for avenues or private gardens, parks, etc. It resembles *C. australis* which is so commonly used in Algiers and southern Spain, but does not attain the large size of this species, so far as I have observed. It should be tried in the Southwest as a shade tree." (*Fairchild.*)

9278. CORYLUS ROSTRATA. **Hazelnut.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1050, August, 1902), February 28, 1903.

Hashibami. "Seeds of this wild species of hazelnut which may prove valuable for breeding purposes. The nut is not highly prized in Japan, and is nowhere given the attention that the hazelnut gets along the Black Sea or in Istria." (*Fairchild.*)

9279. PRUNUS TRIFLORA. **Japanese plum.**

From Kobe, Japan. Received through Messrs. Lathrop and Fairchild (No. 973), January 6, 1903.

Obeni. "Seed, originally from Ikeda, that was bought on the market in Kobe. It is very much like No. 9270. It is evidently one of the favorite market plums of this region. It resembles the American wild-goose plum. The trees are reported to be regular and heavy bearers." (*Fairchild.*")

9280. JUGLANS CORDIFORMIS. **Walnut.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1052, August, 1902), January 6, 1903.

Himegurumi. "A long, pointed walnut which is a narrower and slenderer type than that called in Japan *Otafuku.* Probably both seed variations of the same species." (*Fairchild.*)

9281. PRUNUS TRIFLORA. **Japanese plum.**

From Kobe, Japan. Received through Messrs. Lathrop and Fairchild (No. 974, July 7, 1902), January 6, 1903.

Sumomo of Awaji Island. "A delicate variety, like our wild-goose plums in quality. A thin-skinned, juicy, sour-fleshed, bright-red, translucent variety, with small stone, and a slightly bitter taste near the stone." (*Fairchild.*)

9282. PERILLA OCYMOIDES.

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1054, August, 1902), February 28, 1902.

"Seed of a labiate which is grown extensively in Japan for oil-producing purposes. The oil expressed from the seed is considered the best known for the manufacture of the remarkable oil and leather papers of Japan. It takes the place of linseed, which, I am informed, is not so good for this purpose. The plant can be grown very easily by irrigation or without it in regions where soil is cheap, and there is a possibility that it could be produced cheaply enough to make it a profitable article of export. It should be tried in the irrigated regions of the Southwest. I am informed that Australia imports the oil and the seed also from Japan. In Japan the seed is sown in a nursery bed in the middle of June, and the young plants are transplanted about the 1st of July into rows 2 to 3 feet apart and set 6 inches apart in the row. The ordinary methods of cultivation to keep down the weeds are all that are necessary. It is not grown here on irrigated land. The seed ripens in November. In America it could probably be planted earlier and harvested earlier. According to the owner of an oil mill in Yamada, 100 plants of Perilla yield 1 sho = 0.39 gallon of seed, 17 per cent of which by volume is oil. The price of this oil in Japan, as quoted by the oil mill owner, is 45 yen per koku (1 koku = 39.7 gallons; 1 yen = 50 cents). The seeds are likely to fall out of the dry calyx if left until overripe, and I am told the yield is therefore best in wet seasons. The crop is a variable one, and the price therefore quite variable. Land is so valuable in Japan that this crop does not rank as a good paying one, but if grown on cheap land, in Washington State, for example, it might be produced so cheaply as to pay very well. It is worth a trial at least in the wet regions of Washington." (*Fairchild.*)

9283. RICINUS COMMUNIS. **Castor oil bean.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1055, August, 1902), January 7, 1903.

"For breeding purposes. By request." (*Fairchild.*)

9284. AMYGDALUS PERSICA. **Japanese nectarine.**

From Kobe, Japan. Received through Messrs. Lathrop and Fairchild (No. 975, July 7, 1902), January 6, 1903.

Zumbai momo. "The only variety of nectarines said to be seen on the Kobe market." (*Fairchild.*)

9285. AMYGDALUS PERSICA. **Japanese peach.**

From Kobe, Japan. Received through Messrs. Lathrop and Fairchild (No. 976, July 7, 1902), January 6, 1903.

Taruya. "A typical honey peach, an old variety on the Kobe market. Least valuable and least abundant here." (*Fairchild.*)

9286. TRICHOSANTHES CUCUMEROIDES.

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1058, August, 1902), February 28, 1903.

"Seed of a wild perennial vine of the cucurbit family, which has large, dark-green leaves of unusually beautiful velvet texture. I have never seen such beautiful foliage except on some tropical aroids. This vine I have only seen growing in the shade or semishade of Cryptomeria trees, but I am assured it will grow well in the bright sunlight. If this is true it promises to be an interesting addition to our arbor plants, and deserves to be given the widest possible distribution. Its flowers are said to be very pretty, while its fruit, about the size of a duck's egg, is showy and useful, in Japan at least, where it takes the place of soap. The roots are used for starch production. The seed should be planted in the same way that cucumber seeds are planted. The roots will probably prove hardy all over the United States, but during the first winter some of them should be dug up and kept in a cold house." (*Fairchild.*)

9287. TRICHOSANTHES CUCUMEROIDES.

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1059, August, 1902), February 28, 1902.

"Roots of No. 9286 for immediate trial. They should be planted out next spring after being kept like dahlia roots through the winter." (*Fairchild.*)

9288. TRICHOSANTHES JAPONICA.

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1060, August, 1902), February 28, 1903.

"Seed of a species of cucurbit, related to Nos. 9286 and 9287, but with broader, larger leaves, which have not such a velvety texture. It is said to have fruit twice the size of the latter. These fruits are eaten after preserving in soy or salt. Starch is made from the roots. For trial as an arbor plant." (*Fairchild.*)

9289. SOLANUM sp. (?) **"Kiswaheli" tomato.**

From Tanga, German East Africa. Received through Messrs. Lathrop and Fairchild (No. 1085, January 18, 1903), March 3, 1903.

Ngogwe or *Njanja.* "A native tomato grown by the Kiswahelis of the Tanga region. The fruit is 1½ inches in diameter, egg-shaped, brilliant light red, thick skinned, and with rough protuberances at its apex. The flesh is scanty and with little flavor, placentæ tough, and with many seeds. The negroes say it is a perennial plant, grown everywhere, about 4 feet high." (*Fairchild.*)

9290. TAMARIX CHINENSIS.

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1062, August, 1902), January 6, 1903.

"A species of *Tamarix* which has finer and more delicate foliage than *T. gallica.* It should be tried in Florida and California along the seashore drives in comparison with the ordinary species." (*Fairchild.*)

9291. XANTHOXYLON PIPERITUM. **Japanese pepper.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1063, August, 1902), February 28, 1903.

"A small shrub, the leaves of which are very agreeably aromatic and are used most effectively by Japanese housewives and by Europeans in Japan as a garniture. It would form a very acceptable variation from the conventional parsley. The small round fruits, flower buds, and leaves are boiled with meat dishes to give them a flavor, and the fruits are always served after eels as a digestive." (*Fairchild.*)

9292. TROCHODENDRON ARALIOIDES. **Birdlime tree.**

From Yokohama, Japan. Received through The Yokohama Nursery Company, February 28, 1903.

(This seed was apparently substituted by the Nursery Company for L. and F. No. 1064, *Ilex integra.*) (See 9293.)

9293. TROCHODENDRON ARALIOIDES. **Birdlime tree.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1065, August, 1902), January 6, 1903.

"A species of tree the bark of which is macerated and made into birdlime in Japan. This tree produces the best birdlime in the country, it is said, and there is an export of the article to Europe." (*Fairchild.*)

9294. FAGOPYRUM ESCULENTUM. **Buckwheat.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1066, August, 1902), January 6, 1903.

Sando Soba. From Nagano. "This Nagano buckwheat is famous in Japan, where all sorts of cakes, macaroni, and tarts are made from its flour. The question of the uses of buckwheat in Japan would form a very interesting and profitable study, for there are a hundred ways, I imagine, in which the buckwheat is employed, whereas we know of only a few." (*Fairchild.*)

9295. FAGOPYRUM ESCULENTUM. **Buckwheat.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1067, August, 1902), January 6, 1903.

"A species of *Fagopyrum* which is said to be inferior to *F. esculentum,* but is cultivated and may be of interest for breeding purposes." (*Fairchild.*)

9296. JUNIPERUS CHINENSIS var. PROCUMBENS.

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1068, August, 1902), January 6, 1903.

"A beautiful procumbent juniper which is used most effectively as a substitute for lawns on sloping embankments. It covers them with a mass of luxuriant foliage which is strikingly effective. In the Tokyo Botanic Gardens there is a very attractive lawn made in this way. The plants should be set about 3 feet apart each way and allowed to run freely in all directions until they completely cover the ground with a thick mat 12 to 18 inches deep. It will probably prove hardy about Washington." (*Fairchild.*)

9297 and 9298. SOLANUM MELONGENA. **Eggplant.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1069, August, 1902), January 6, 1903.

9297.

Naga nasu. "Considered the best variety in Japan, where eggplants are very largely eaten. They are even used for candying purposes. A candied eggplant is very delicate indeed, tasting something like a fig." (*Fairchild.*)

9298.

Maru nasu. "A round, black variety of eggplant, sold everywhere in the markets of Japan." (*Fairchild.*)

9299. ZOYSIA PUNGENS. **Japanese lawn grass.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1071, August, 1902), January 6, 1903.

Birodoshiba. "A very fine-leaved lawn grass which forms a most beautiful velvet-like turf. The plant is said to have originated in southern Japan, to be sensitive to frost, but to be one of the prettiest lawn grasses in the country. It should be tested in California and Florida, where good lawn grasses are desired." (*Fairchild.*)

9300. ZOYSIA PUNGENS. **Japanese lawn grass.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1072, August, 1902), January 6, 1903.

"A coarser leaved species of lawn grass than No. 9299, but otherwise of similar habit. These potted plants should be split up into a large number of small pieces and set out as is usually done with lawn grasses not grown from seed. It is said to be hardier than No. 9299." (*Fairchild.*)

9301. ALLIUM FISTULOSUM. **Forcing onion.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1073, August, 1902), January 6, 1903.

"The seed is sown in spring and the young onions are dug in July and inclined in long deep trenches, where they are gradually covered with earth almost to their tops. This covering of earth bleaches them and makes a length of about 14 inches of leaf edible. Sometimes the seed is sown in autumn and the transplanting to trenches done in the spring." (*Fairchild.*)

9302. AMYGDALUS PERSICA. **Peach.**

From Kobe, Japan. Received through Messrs. Lathrop and Fairchild (No. 977, July 7, 1902), January 6, 1903.

Samomo. "This is the earliest ripening peach on the Kobe market. It is not very sweet but is of attractive color. It is an old sort in Kobe." (*Fairchild.*)

9303. MEDICAGO SATIVA. **Alfalfa.**

From Limache, Peru. Presented by Mr. Adolfo Eastman Cox. Received October 20, 1903.

Seed of the native Peruvian alfalfa. Secured in Peru by Beéche, Duval & Co., and shipped through their house in New York.

"This variety has the following advantages over the Chilean: The stems are hollow and more succulent; the growth commences earlier in spring and continues later in the autumn, materially increasing the yield per acre, and it grows taller. On the other hand care has to be taken in feeding stock on it as it is apt to produce hoven (heaves)." (*Cox.*)

9304. AMYGDALUS PERSICA. **Peach.**

From Kobe, Japan. Received through Messrs. Lathrop and Fairchild (No. 978, July 7, 1902), January 6, 1903.

Tinsin Suimitsuto. "One of the favorite sorts on the Kobe market, although too light in color to be very attractive. It is of large size and has been, it is said, recently introduced into southern Japan. According to nurserymen in Saitama Prefecture this can not be what they call the *Tinsin Suimitsuto* for that has *red* flesh, even before wholly ripe." (*Fairchild.*)

9305. AMYGDALUS PERSICA. **Peach.**

From Kobe, Japan. Received through Messrs. Lathrop and Fairchild (No. 979, July 7, 1902), January 6, 1903.

Suimitsuto. "One of the earliest sorts and one of the sweetest of the peaches in the Kobe market. It differs in shape from the *Honey* type, being more like the *Persian.* It comes from the province of Sanuki, Japan." (*Fairchild.*)

9306. PRUNUS TRIFLORA. **Plum.**

From Kobe, Japan. Received through Messrs. Lathrop and Fairchild (No. 980, July 7, 1902), January 6, 1903.

Botankyo. "A light-colored variety of Hatankyo. A large-fruited plum, with very juicy flesh and thin skin." (*Fairchild.*) (See Nos. 9202–9210.)

9307. VICIA FABA. **Broad bean.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1031, August, 1902), January 6, 1903.

Otafuku. "Said to be remarkable for its size and good quality. The young beans of this variety are said to be especially delicious." (*Fairchild.*)

9308 to 9312. VICIA FABA. **Broad bean.**

From Yokohama, Japan. Received through Messrs. Lathrop and Fairchild (No. 1032, August, 1902), January 6, 1903.

"Five sorts of the Japanese broad bean or *Sora mame,* as follows:

9308.

Chiu otafuku.

9309.

Isun mame.

9310.

Kotsubu.

9311.

Yatanbusa.

9312.

Tsunashimam ame.

"The broad bean plays an important rôle in Japan, being grown extensively in ground which is later used for paddy rice. It is particularly abundant on the coast of the Japan Sea and in the colder parts of Japan. Almost exclusively used for human food." (*Fairchild.*)

9313. PRUNUS TRIFLORA **Plum.**

From Kobe, Japan. Received through Messrs. Lathrop and Fairchild (No. 981, July 7, 1902), January 6, 1903.

Hatankyo. "This is like the variety *Satsuma* in America and may be the same, though I am not familiar enough with the American type to say. The flesh is a blood or claret red color, very juicy, and not very sweet." (*Fairchild.*) (See No. 9202.)

9314. MYRICA NAGI.

From Kobe, Japan. Received through Messrs. Lathrop and Fairchild (No. 982, July 7, 1902), January 6, 1903.

Yama momo. "This fruit is said to be cultivated in the province of Kii. The beautiful fruits look something like raspberries, but resemble most in shape small fruits of *Arbutus unedo,* the strawberry tree of Italy. Their flesh is deep wine red, mildly acid, and refreshing. A very decorative fruit for fruit dishes, but not of great value for other purposes. Mr. Tanaka says it grows wild in the warm regions of Japan and forms a tree 20 feet high. The bark furnishes a tanning material." (*Fairchild.*)

9315. PANICUM TRYPHERON. **Guinea grass.**

From Sabana Grande, Porto Rico. Presented by Mr. Frank D. Gardner, special agent in charge of the Porto Rico Experiment Station. Received January 10, February 3, and February 9, 1903.

One of the best fodder grasses of the Tropics.

9316. MYRICA FAYA.

From St. Michael, Azores. Presented by Mr. F. S. Chaves. Received January 12, 1903.

9317. OPUNTIA FICUS-INDICA. **Prickly pear.**

From Taormina, Sicily. Received through Messrs. Lathrop and Fairchild (No. 1079, November 24, 1902), January 17, 1903.

"A prickly pear which bears fruit containing comparatively few seeds. The variety is a white-fleshed one of medium size. The thallus is very spiny indeed, and the fruit is covered with small spines. This sort is considered more delicious than the ordinary kinds, and having but few seeds is in this respect entitled to the consideration of growers. A comparatively small number of plants of this variety are grown about Taormina, because the fruit is not a good market one, neither is it a very heavy cropper, but as the starting point for a seedless-fruited cactus it should appeal to any breeder of this very important and much neglected group of useful plants." (*Fairchild.*)

9318. ALLIUM CEPA. **Onion.**

From Valencia, Spain. Received through Hon. R. M. Bartleman, United States Consul, January 26, 1903.

"This large, mild-flavored onion is a native of Denia and the whole Valencia region. Attempts to grow these onions in other parts of Europe have not been successful, as they generally lose their mild flavor after the first season. The size of the onion is regulated by the farmers to suit the taste of the foreign buyers. Those shipped to the United States are the largest grown, and those intended for British markets the smallest. The seed is planted in beds from the middle of January until the first week in February, and transplanted when sufficiently developed. When large onions are desired, the plants are placed about 10 inches apart and plied with fertilizers and large quantities of water. When smaller ones are desired the plants are placed close together." (*Bartleman.*)

C. C. Morse & Co., of Santa Clara, Cal., state that this onion is without doubt the progenitor of Maule's "Prize Taker."

9319. PRUNUS ARMENIACA. **Apricot.**

From San Luis Potosi, Mexico. Received through Mr. G. Onderdonk, of Nursery, Tex., special agent of this Department, October, 1902.

9320. AMYGDALUS PERSICA. **Peach.**

From San Luis Potosi, Mexico. Received through Mr. G. Onderdonk, of Nursery, Tex., special agent of this Department, October, 1902.

9321. AMYGDALUS PERSICA. **Peach.**

From Saltillo, Mexico. Received through Mr. G. Onderdonk, of Nursery, Tex., special agent of this Department, October, 1902.

9322. MEDICAGO SATIVA. **Alfalfa.**

From Tuggurt, Algeria. Received through Mr. Thomas H. Kearney, December 8, 1902.

An alkali-resistant variety. Crop of 1902.

9323. MEDICAGO SATIVA. **Alfalfa.**

From Tuggurt, Algeria. Received through Mr. Thomas H. Kearney, December 8, 1902.

An alkali-resistant variety. Crop of 1901.

9324. TRITICUM DURUM. **Wheat.**

From Relizane, Algeria. Received through Mr. Thomas H. Kearney, December 8, 1902.

Marouani. An alkali-resistant variety.

9325. PISTACIA ATLANTICA. **Afsie or Betoom.**

From Duperré, Algeria. Received through Mr. W. T. Swingle (No. 122) from Dr. L. Trabut, Government Botanist of Algeria. Collected by Mr. Frank Joly. Received January 10, 1903.

"A large tree, reaching 40 to 50 feet in height and 4½ feet in diameter. The leaves produce a gall 'Afs-el-betoom,' which is an article of considerable commercial importance in Tripoli and Tunis. It is the only tree of any size growing in the northern Sahara, where it occupies the 'dayas' or depressions in the plateaus. Of much promise as a drought and alkali resistant stock for the pistache. A deciduous tree, not so resistant to cold as the Chicudia." (*Swingle.*)

9326 to 9341. ORYZA SATIVA. **Rice.**

From Lake Charles, La. Received through Dr. S. A. Knapp, January 19, 1903.

9326.

Shinriki. Grown from No. 8300. From Hyogo district, Japan. Doctor Knapp considers this the best early Japan rice.

9327.

Shiratama. Grown from No. 8301. From Fukuoka district, Japan. A very good early variety.

9328.

Komachi. Grown from No. 8302. From Kumamoto district, Japan. This is a medium late variety of no great value.

9329.

Omase. Grown from No. 8303. From Kumamoto district, Japan. One of the best medium varieties.

9330.

Miyako. Grown from No. 8304. From Yamaguchi district, Japan. A medium early variety that may be of value.

9331.

An unnamed variety. Grown from No. 8305. From Chiugoku district, Japan. This is not so early as No. 9326, but has many good qualities.

9332.

An unnamed variety. Grown from No. 8306. From Chikuzen district, Japan. One of the best medium varieties. Practically the same as *Kiushu.*

9333.

Fusakichi. Grown from No. 8508. From Bizen district, Japan. A medium early variety of remarkable quality. The seeds are exceptionally large, and on suitable land, with plenty of water, this will probably be one of the very best varieties.

9334.

Mansaku bozu. Grown from No. 8509. From Fukuoka district, Japan. This is one of the best medium varieties.

9335.

An unnamed variety. Grown from No. 8310. From Ise district, Japan. This is a medium variety and may become valuable.

9336.

An unnamed variety. Grown from No. 8511. From Buzen district, Japan. This is a medium variety and may prove valuable.

9326 to 9341—Continued.

9337.

An unnamed variety. Grown from No. 8512. From Iyo district, Japan. This is a medium late variety of extra vigor and fairly good yield.

9338.

An unnamed variety. Grown from No. 8513. From Higo district, Japan. This is one of the best late varieties.

9339.

An unnamed variety. Grown from No. 8514. From Bizen district, Japan. This is a late variety that may prove valuable.

9340.

An unnamed variety. Grown from No. 8515. From Banshu district, Japan. This is the best late variety.

9341.

Honduras rice. One of the standard varieties, grown for comparison.

9342. ORYZA SATIVA. **Rice.**

From Kin-hua, China. Secured by Dr. S. P. Barchet, of the United States consulate, Shanghai, China, at the request of Dr. S. A. Knapp. Received January 22, 1903.

A late variety sown in May.

9343. ORYZA SATIVA. **Rice.**

From Ki-ni, Kin-hua, China. Secured by Dr. S. P. Barchet, of the United States consulate, Shanghai, China, at the request of Dr. S. A. Knapp. Received January 22, 1903.

Glutinous rice. Sown in May.

9344. GLYCINE HISPIDA. **Soy bean.**

From Chiu-hua, China. Secured by Dr. S. P. Barchet, of the United States consulate, Shanghai, China, at the request of Dr. S. A. Knapp. Received January 22, 1903.

Chiu-hua. "In case of future reference to the bean, if you call this the *Chiu-hua* bean I shall know what is meant, in the absence of a botanical name, as I have not seen this bean anywhere else. It is sown broadcast in paddy fields before the rice is harvested. The moist ground favors the sprouting, and the standing grain shields the sprouting plant from the sun. By the time the rice is harvested the beans have taken firm roots and require no further care. Horses and cattle are very fond of them green or in the ripe state. The bean also makes a good food for man. This bean I think well worth a trial in the Southern States." (*Barchet.*)

9345. AMYGDALUS COMMUNIS. **Almond.**

From Mustapha, Algiers, Algeria. Presented by Dr. L. Trabut, Government Botanist. Received January 26, 1903.

Cuttings of the wild almond of the mountains of Algeria, said to be excellent for stock.

9346. PRUNUS DOMESTICA. **Plum.**

From Mustapha, Algiers, Algeria. Presented by Dr. L. Trabut, Government Botanist. Received January 26, 1903.

Reine Claude Rouge. Cuttings of this plum. Marked by Doctor Trabut "Glorion Vincent."

9347. LINUM USITATISSIMUM. **Flax.**

From Rotterdam, Holland. Received through F. Dutilh & Co., January 29, 1903.

Dutch Riga-Child. Extra picked. From crop of 1902.

9348 to 9351. AMYGDALUS COMMUNIS. **Almond**

From Alicante, Spain. Received through Mr. D. G. Fairchild (Nos. 740, 741, 745, 755a, July 19 and 20, 1901), January 30, 1903.

A collection of young almond trees budded on myrobalan stocks by Mr. Georges Boucher, Paris, France, with buds secured by Mr. Fairchild in Spain.

9348.

Mollar. (No. 740.)

9349.

Planeta. (No. 741.)

9350.

Castillet. (No. 745.)

9351.

Pastaneta. (No. 755a.)

(See Nos. 7985 to 7989 and 9458 to 9462.)

9352. OPUNTIA FICUS-INDICA. **Prickly pear.**

From Malta. Received through Messrs. Lathrop and Fairchild (No. 1082, December 27, 1902), January 31, 1903.

"Fruits from the plants of this variety contain less than 12 seeds, according to Dr. Giovanni Borg, of Malta, who kindly presents them to the Department. These seeds are very small and not at all objectionable. The fruit inside and out is yellowish orange in color, of good flavor, Doctor Borg says, and of the size of a goose egg. The thallus is nearly spineless. It is a rare plant even in Malta. These fruits came from plants growing in a garden in Siggiewi." (*Fairchild.*)

9353. OPUNTIA FICUS-INDICA. **Prickly pear.**

From Malta. Received through Messrs. Lathrop and Fairchild (No. 1083 December 27, 1902), January 31, 1903.

"This variety resembles No. 9352 closely, but the fruits are much smaller, being only the size of a hen's egg. Seedless or at least with very few seeds. The thallus is nearly spineless. The minute bristles on the fruit, according to Dr. Giovanni Borg, can be removed by washing the fruits in a basin of water with a whisk broom. The water loosens up the small cushions of bristles and they are easily brushed away into the water. This variety is not as promising as No. 9352, but is worthy a place in the breeder's collection. The fact of its seedlessness and spinelessness makes it a valuable variety of *Opuntia* for any economic studies on the subject. From Professor Pisani's villa at Maurisi, near Zeitun, Malta." (*Fairchild.*)

9354. FICUS CARICA. **Fig.**

From Malta. Received through Messrs. Lathrop and Fairchild (No. 1084, December 28, 1902), January 31, 1903.

St. Anthony. "Dr. Giovanni Borg, director of the botanic garden, says this is one of the most delicious figs he has ever eaten. It ripens one crop of figs in June and a second in September or October. The regular late crop is red in color. No caprification is deemed necessary for this sort, which Doctor Borg thinks could be used for drying purposes. It is an uncommon variety." (*Fairchild.*)

9355. ARACHIS HYPOGAEA. **Peanut.**

From Tanegashima, Japan. Presented by Mr. H. E. Amoore. Received February 2, 1903.

9356 and 9357. ZEA MAYS. **Corn.**

From Forestburg, S. Dak. Presented by Mr. H. C. Warner. Grown from S. P. I. No. 13, which was found to be a mixture of types.

9356.	9357.
Malakoff sugar corn. White type.	Amber type.

9358. TRITICUM VULGARE. **Wheat.**

From the estate of Mr. Bezouglov, near Byeloglinskaya, Don Territory, Russia. Obtained by Mr. E. A. Bessey (No. 110, August 4, 1902), through the Theodore N. Solodov Milling Company, Rostov-on-Don, Russia. Received February 3, 1903.

Beloglino. "A hard, red, winter wheat from the crop of 1902. This has just been harvested and thrashed at this date and is of very good quality, far exceeding that of last year." (*Bessey.*)

9359. MEDICAGO SATIVA. **Alfalfa.**

From Erivan, Caucasia. Obtained by Mr. E. A. Bessey (No. 236, October 7, 1902), through Mr. N. P. Taratinoff, of Tiflis. Received February 3, 1903.

"Alfalfa from Erivan Province, the hottest and driest province in summer and coldest in winter (reaching —22° F.). It should prove valuable in cold regions." (*Bessey.*)

9360 to 9402.

From Tiflis, Russian Caucasus. Presented by Mr. A. Rolloff, director of the botanic garden, through Mr. E. A. Bessey. Received February 3, 1902.

9360. PYRUS COMMUNIS. **Pear.**

Sini. (No. 209.)

9361. PYRUS COMMUNIS. **Pear.**

Nana-armud. (No. 210.)

9362. PRUNUS DOMESTICA. **Plum.**

Vazirali. (No. 211.)

9363. PRUNUS DOMESTICA. **Plum.**

Tchantchuri. (No. 212.)

9364. PRUNUS ARMENIACA. **Apricot.**

Agdzhanabad. (No. 213.)

9365. PRUNUS ARMENIACA. **Apricot.**

Achverdi. (No. 214.)

9366. PRUNUS ARMENIACA. **Apricot.**

Badam-arik. (No. 215.)

9367. PRUNUS ARMENIACA. **Apricot.**

Norrast. (No. 216.)

9368. PRUNUS ARMENIACA. **Apricot.**

Tabarzei. (No. 217.)

9369. PRUNUS ARMENIACA. **Apricot.**

Bairam-ali. From Turkestan. (No. 218.)

9360 to 9402—Continued.

9370. PRUNUS ARMENIACA. **Apricot.**

Red Yusup-Khan. From Turkestan. (No. 219.)

9371. PRUNUS ARMENIACA. **Apricot.**

White Yusup-Khan. From Turkestan. (No. 220.)

9372. AMYGDALUS PERSICA. **Peach.**

Zafrani. (No. 221.)

9373. AMYGDALUS PERSICA. **Peach.**

Nazli. (No. 222.)

9374. AMYGDALUS PERSICA. **Peach.**

Novrast-huli. (No. 223.)

9375. AMYGDALUS PERSICA. **Peach.**

Salami. (No. 224.)

9376. AMYGDALUS PERSICA. **Peach.**

Narindzhi. (No. 225.)

9377. AMYGDALUS PERSICA. **Peach.**

Sachravi. (No. 226.)

9378. AMYGDALUS PERSICA. **Peach.**

Arabuli. (No. 227.)

9379. AMYGDALUS PERSICA. **Peach.**

Tibatvica. (No. 228.)

9380. AMYGDALUS PERSICA. **Peach.**

Gandzhuri. (No. 229.)

9381. FICUS CARICA. **Fig.**

Tschapla. (No. 230.)

9382. ELAEAGNUS ANGUSTIFOLIA.

Matna-pshat. (No. 231.)

9383. ELAEAGNUS ANGUSTIFOLIA.

Unab-pshat. (No. 232.)

9384. MORUS ALBA.

Gandzha. (No. 233.)

9385. PUNICA GRANATUM.

Krmzi-kabuck. (No. 234.)

9386. PUNICA GRANATUM.

Shirin-nar. (No. 235.)

9387. Mixture of seeds of PYRUS SALICIFOLIA and P. ELAEAGRIFOLIA. (Nos. 203 and 204.)

9388. PYRUS COMMUNIS. **Pear.**

Wild pear. (No. 202.)

9360 to 9402—Continued.

9389. Amygdalus persica. **Peach.**

Wild peach.

9390. Prunus armeniaca. **Apricot.**

Wild apricot. (No. 205.)

Seeds of cultivated varieties of peaches as follows:

9391. Amygdalus persica. **Peach.**

Narindschi. (No. 206.)

9392.

Guli. (No. 208.)

9393.

Zafrani. (No. 207.)

9394.

Novrast.

9395.

Spitak.

9396.

Lodz.

Seeds of cultivated sorts of apricots, as follows:

9397. Prunus armeniaca. **Apricot.**

Schalogi.

9398.

Agdschanabad.

9399.

Chosrof-schack.

9400.

Badam-arik.

9401.

Gevondi.

9402.

Gegdschanabad.

9403. Stryphnodendron barbatimao.

From São Paulo, Brazil. Presented by Dr. Alberto Löfgren, director of the Botanic Garden. Received February 2, 1903.

"The bark of this tree contains considerable tannin." (*Löfgren.*)

9404 and 9405. Phaseolus sp. **Bean.**

From São Paulo, Brazil. Presented by Dr. H. M. Lane. Received February 4, 1903.

9404. **Brown bean.**

Feijão mulato.

9405. **Black bean.**

Feijão preto.

9406. Arachis hypogaea. **Peanut.**

From São Paulo, Brazil. Presented by Dr. H. M. Lane. Received February 4, 1903.

Ordinary variety.

9407 to 9418. GLYCINE HISPIDA. **Soy bean.**

A collection of soy beans grown by Mr. W. R. Beattie on the experimental grounds on the Potomac Flats, from introduced seed.

9407.

Grown in 1902 from S. P. I. No. 4912.

9408.

Grown in 1902 from S. P. I. No. 4913.

9409.

Grown in 1902 from S. P. I. No. 4914.

9410.

Grown in 1901 and 1902 from S. P. I. No. 6312.

9411.

Grown in 1901 and 1902 from S. P. I. No. 6333.

9412.

Grown in 1901 and 1902 from S. P. I. No. 6334.

9413.

Grown in 1901 and 1902 from S. P. I. No. 6336.

9414.

Grown in 1901 and 1902 from S. P. I. No. 6386.

9415.

Grown in 1901 and 1902 from S. P. I. No. 6396.

9416.

Grown in 1901 and 1902 from S. P. I. No. 6397.

9417.

Grown in 1901 and 1902 from S. P. I. No. 6414.

9418.

Grown in 1901 and 1902 from S. P. I. No. 6416.

9419. PHASEOLUS MUNGO-RADIATUS (?). **Gram.**

Grown on Potomac Flats in 1902 by Mr. W. R. Beattie from S. P. I. No. 6417.

9420. AMYGDALUS PERSICA. **Peach.**

From Pomona, N. C. Presented by Mr. J. Van Lindley. Received February 6, 1903.

Natural peach seed from the seedling peach orchards, for growing as stocks in comparison with Mexican seed.

9421. LINUM USITATISSIMUM. **Flax.**

From Perwez, Belgium. Received through Emile Mathy, February 8, 1903.

First choice.

9422. Avena sativa. Oat.

From Moscow, Russia. Received through Mr. E. A. Bessey, from Immer & Sons (No. 104, July 22, 1902), February 10, 1903.

Swedish Select. "This excellent variety has proven exceptionally good for the dry Steppe region. This is a selection made in Sweden of the Ligowo oat and bred up by Immer & Sons. It originally came from Ladoga, near St. Petersburg. This year's crop." (*Bessey.*)

9423 to 9425. Panicum miliaceum. Proso.

From Moscow, Russia. Received through Mr. E. A. Bessey, from Immer & Sons. (Nos. 105 to 107, July 22, 1902.)

9423.

Red Orenburg. Crop of 1902. Received February 10, 1903. (No. 105.)

9424.

Red Vorónezh. Crop of 1902. Received May 22, 1903. (No. 106.)

9425.

Black Vorónezh. Crop of 1902. Received May 22, 1903. (No. 107.)

9426. Pistacia lentiscus. Mastic.

From the rocky cliffs along the seashore, between Leghorn and Castiglioncello, Italy. Collected by Mr. W. T. Swingle (No. 123, January 14, 1903). Received February 17, 1903.

"The lentisk or mastic tree is found chiefly in the immediate vicinity of the sea in the Mediterranean region wherever the winters are not too severe (it is decidedly less hardy than the terebinth). Its northern limit is about the January isotherm of 42.8° to 46.4° F. It is a small evergreen tree (other species of *Pistacia* are deciduous) or more often a shrub, branching profusely from the ground. When growing in tree form it sometimes reaches a height of 20 to 25 feet, and a diameter of 8 inches to one foot. *It prefers silicious soils and avoids those decidedly calcareous* in nature, being just the opposite of the terebinth, so the two are very rarely seen growing together in a wild state. The leaves are rich in tannin (11.5 per cent), and are collected and sold in Tunis as a substitute for sumac for tanning. The seeds are much liked by pigs, goats, and wild boars in Tunis, and are an important source of food in dry years when the fruit is apt to be unusually abundant, while other forage is scarce. In Chios a grafted variety yields *mastic*, a soft resin much prized in the Orient for chewing gum and for flavoring liquors. This is a promising stock on which to graft the pistache, especially on silicious or slightly acid soils near the sea. It is said not to be so long lived as the terebinth, and the pistache, when grafted on the lentisk, is said to live only forty years, whereas it lives one or two centuries on the terebinth. It is probably a dwarf stock and pistaches grafted on it should be set out at smaller distances apart than on other stocks. On sandy soil with moderate bottom heat, there should be no difficulty in starting the cuttings." (*Swingle.*)

9427 to 9436.

From Nice, France. Presented by Mr. A. Robertson-Proschowsky. Received January 12, 1903.

A collection of seeds as follows:

9427. Aristolochia elegans.

9428. Cestrum elegans.

9429. Cistus albidus.

9430. Cleome arborea (?)

9431. Dolichos lablab.

9432. Echinocactus schumannianus.

9433. Phlomis fruticosa.

9434. Sutherlandia frutescens.

9435. Pittosporum undulatum.

9436. Tacsonia manicata.

9437. CITRUS AURANTIUM. **Orange.**

From Mustapha, Algiers, Algeria. Presented by Dr. L. Trabut, Government Botanist. Received February 16, 1903.

Seeds of the *Condja* (?) orange. Fruit very large and sweet, four hundred grams or more, resembling the *Jaffna*. One or two seeds of each fruit. It reproduces true to seed.

9438 to 9444. PHASEOLUS sp. **Bean.**

From Mexico. Received through Dr. Edward Palmer, February 21, 1903. A collection of different varieties of beans, as follows:

9438.

Garbansillo. From Saltillo. "First-class bean and seems a little different from the one at San Luis Potosi of the same name (No. 9155). When the bean from San Luis Potosi is brought to Saltillo for sale it is objected to because it is said to take more fuel for cooking, and fuel is an object. This is probably due to the fact that the water at San Luis Potosi is hard, while that at Saltillo is soft. This bean is very prolific in this section of the table-lands and is the choice of all who can afford to purchase it. Bought from Jesus Santos Grande, Saltillo, Mexico." (*Palmer.*)

9439.

Vayo-gordo. From Saltillo. "A first-class bean and a great favorite with the rich. It is said to be very productive in this section, and as it is not very dark in color it might claim recognition in the United States." (*Palmer.*)

9440.

Frijol para la sopa. From San Luis Potosi. "Not of very good quality, but much used for soups. Apparently a poor quality of *Blanco bolador.*" (*Palmer.*)

9441.

Canelo Gordo. From Saltillo. "A first-class bean which can be had in large quantities at the markets." (*Palmer.*)

9442.

Canelo Chico. From Saltillo. "A first-class bean; plentiful in the markets. It is used extensively." (*Palmer.*)

9443.

Guadalupano. From Saltillo. "A bean not much seen on the markets, somewhat resembling the *Borrado.* It is a second-class bean." (*Palmer.*)

9444.

Bolador de Color. From Saltillo. "A third-class bean, and only eaten when others can not be obtained, and then only after boiling and frying in lard." (*Palmer.*)

9445. SOLANUM sp. **Pepper.**

From San Luis Potosi, Mexico. Received through Dr. Edward Palmer, February 21, 1903.

Chili guipin. "Sold in the markets of San Luis Potosi and commonly eaten by the well-to-do. A very hot pepper. Eaten before and with soups." (*Palmer.*)

9446. PISTACIA LENTISCUS. **Mastic.**

From rocky cliff near seashore, opposite Castello Sonnino, between Leghorn and Castiglioncella, Italy. Received through Mr. W. T. Swingle (No. 124), February 20, 1903.

9447. ANACARDIUM OCCIDENTALE. **Cashew.**

From Beira, East Africa. Presented by Mr. Arthur W. H. Glenny, United States consular agent at Beira, through Messrs. Lathrop and Fairchild (No. 1092, January 28, 1903), March, 1903.

"Seed of the West Indian cashew, which came from trees growing in Rhodesia that seem unusually hardy and grow at an altitude of several thousand feet, where occasional frosts are said to occur. Worthy of trial in Florida and Porto Rico." (*Fairchild.*)

9448. PHYSALIS sp.

From Saltillo, Mexico. Received through Dr. Edward Palmer, February 21, 1903.

"A large, dark plum-colored variety, used in soups and stews. Also fried with beefsteak and sometimes used in dressings for fowls. Fruits secured in November, 1902, were sound February 6, 1903, when the seeds were removed." (*Palmer.*)

9449. ZEA MAYS. **Corn.**

From Ravenna, Ohio. Presented by the Ford Seed Company. Received February 24, 1903.

Malakhoff sugar. Grown from S. P. I. No. 13.

9450. MEDICAGO SATIVA. **Alfalfa.**

From Askhabad, Trans-Caspian Territory, Turkestan. Received through Mr. E. A. Bessey (No. 113, August 23, 1902), from Sadik-Bek Agabekov, acting governor of the district of Askhabad. February 28, 1903.

"The sort of alfalfa grown by the natives (*Tekins*) from time immemorial. Apparently well adapted to a very hot climate of low humidity and mild winters. This variety will probably not be suited for northern climates, but will thrive, when irrigated, in the very hottest, driest regions, as Askhabad is almost the hottest point in Turkestan." (*Bessey.*)

9451. MEDICAGO SATIVA. **Alfalfa.**

From Sairam, near Chimkent, Russia. Received through Mr. E. A. Bessey, from Mr. H. W. Dürrschmidt, of Tashkent (No. 150, September 29, 1902), February 28, 1903.

"The alfalfa of this region (and also around Karabulák, 24 miles northwest of Sairam) is considered to be about the best in Turkestan. It is grown in considerable quantities throughout the whole region. This is probably the coldest region in Turkestan where alfalfa is grown in such large quantities. This ought to be good for cool regions." (*Bessey.*)

9452. MEDICAGO SATIVA. **Alfalfa.**

From Karabulák, 25 miles north of Chimkent, Russia. Received through Mr. E. A. Bessey, from Mr. H. W. Dürrschmidt, of Tashkent (No. 151, September 29, 1902), February 28, 1903.

"The same methods of culture as in Sairam, only in slightly larger fields. As in Sairam, it is grown with the aid of irrigation. Sent for trial in cool regions." (*Bessey.*)

9453. MEDICAGO SATIVA. **Alfalfa.**

From Bokhara, Turkestan. Received through Mr. E. A. Bessey, from Mr. H. W. Dürrschmidt, of Tashkent (No. 152, September 29, 1902), February 28, 1903.

"Bokhara is a region containing much alkali land; the soil has a white crust when dry. Large fields of various crops are destroyed by alkali. This seed is not especially resistant to cold. It is sent for trial in alkali regions." (*Bessey.*)

9454. MEDICAGO SATIVA. **Alfalfa.**

From Khiva, Turkestan. Received through Mr. E. A. Bessey, from Mr. H. W. Dürrschmidt, of Tashkent (No. 153a, November 6, 1902, numbered in sack 153), February 28, 1903.

"Khiva is one of the driest regions in Turkestan, the average rainfall being less than 3 inches a year. It is correspondingly hot in summer, but rather cold in winter; much colder than Bokhara, Askhabad, or Karshi. Alfalfa is grown only by irrigation. It is fertilized abundantly, at least with fresh soil if not with animal manure." (*Bessey.*)

9455. MEDICAGO SATIVA. **Alfalfa.**

From Karshi, Turkestan. Received through Mr. E. A. Bessey, from Mr. H. W. Dürrschmidt, of Tashkent (No. 154a, November 6, 1902, numbered in sacks 154), February 28, 1903.

"Karshi lies about 80 miles southwest of Samarcand and about as far southeast of Bokhara. It is in the edge of the mountains and much cooler than Bokhara." (*Bessey.*)

9456. QUERCUS SUBER. **Cork oak.**

From Paris, France. Received through Vilmorin-Andrieux & Co., March 5, 1903.

9457. LINUM USITATISSIMUM. **Flax.**

From Riga, Russia. Received through the United States consul, from A. Sellmar, March 6, 1903.

Best Riga.

9458 to 9462. AMYGDALUS COMMUNIS. **Almond.**

Received through Mr. J. W. Kerr, Denton, Md. Grown by Mr. Kerr from buds furnished by this Department. Received March 7, 1903.

9458.

Castillet. Grown from S. P. I. No. 7133.

9459.

Fabrica. Grown from S. P. I. No. 7135.

9460.

Jordan. Grown from S. P. I. Nos. 7398 and 7401, mixed.

9461.

Mollar. Grown from S. P. I. No. 7061.

9462.

Planeta. Grown from S. P. I. No. 7062.

See Nos. 7985 to 7989 and 9348 to 9351. Budded on peach stocks.

9463 and 9464. PRUNUS ARMENIACA. **Apricot.**

Received through Mr. J. W. Kerr, Denton, Md. Grown by Mr. Kerr from buds furnished by this Department. Received March 7, 1903.

9463.

Patriarca. Grown from S. P. I. 7136.

9464.

Grown from S. P. I. No. 6844.

9465. ROSA sp. **Rose.**

From Cannes, France. Received through Mr. J. B. Cognet, United States consular agent, March 9, 1903.

The true perfume rose.

9466. ANONA CHERIMOLIA.

Plants grown in Department greenhouse from seed presented by Capt. J. J. Haden, Cocoanut Grove, Fla., April 16, 1902. Plants numbered March 11, 1903.

9467. ERIOBOTRYA JAPONICA. **Loquat.**

Seedling plants grown in Department greenhouse from seeds of large loquat tree in orange house. Plants numbered March 11, 1903.

9468. ERIODENDRON ANFRACTUOSUM. **Kapok.**

From Marseille, France. Presented by the United States Consulate. Received February 14, 1903. Turned over to the Office of Seed and Plant Introduction by Mr. L. H. Dewey, Assistant Botanist.

9469 and 9470. PYRUS MALUS. **Apple.**

From Naples, Italy. Presented by Prof. L. Savastano through Messrs. Lathrop and Fairchild (Nos. 1077 and 1078). Received March 14, 1903.

9469.

Annurco. "The leading market apple of the region about Naples. It is a showy red apple, with yellow streaks, and has an unusually high flavor for a variety grown so far south. It should be tested in the Southern States. Obtained through the kindness of Professor Savastano, of the agricultural school at Portici." (*Fairchild.*)

9470.

Limoncelli. "A lemon-yellow fruited variety; one of the best market varieties of southern Italy. It has a hard, crisp, slightly tough flesh, subacid and highly flavored. It is not as good as No. 9469, but I believe is a better keeper. Obtained through the kindness of Professor Savastano, of the agricultural school at Portici." (*Fairchild.*)

9471. PYRUS MALUS. **Apple.**

From Portici (Naples), Italy. Presented by Prof. L. Savastano through Messrs. Lathrop and Fairchild. Received March 14, 1903.

Melo gelato. "Grows well in the warm region about Naples. In cold countries the yield is poor. It does best in calcareous soil." (*Fairchild.*)

9472. **Palm.**

From Black River, Honduras. Presented by Mr. Frank Dean through Dr. H. J. Webber of this Department. Received March 16, 1903.

Two ounces of seed of a small, pinnate-leaved palm 6 feet high. Foliage dark green. Fine for conservatories.

9473. ATTALEA COHUNE (?) **Palm.**

From Black River, Honduras. Presented by Mr. Frank Dean through Dr. H. J. Webber of this Department. Received March 16, 1903.

Coquito. A large pinnate-leaved palm.

9474. PISTACIA MUTICA (?)

From Smyrna, Turkey in Asia. Purchased from Mr. B. J. Agadjanian, at the request of Mr. W. T. Swingle (No. 121). Received March 21, 1903.

"The celebrated turpentine tree of Chios, from which a kind of turpentine is extracted by making incisions in the bark. It grows to a large size, reaching a diameter of 5 feet 2½ inches and a height of 40 to 60 feet. The seeds yield an oil used for culinary purposes and in making toilet soaps. This tree is of great promise for use as a stock on which to graft the pistache, especially for semiarid regions in the Southwest, where this tree would be able to grow without irrigation. Worthy of trial as a shade and timber tree in warm dry regions. It is deciduous." (*Swingle.*)

9475. CAPSICUM ANNUUM. **Red pepper.**

From Pasadena, Cal. Presented by Capt. C. W. Livermore. Received March 21, 1903.

Paprica.

9476. MYRICA FAYA.

From St. Michaels, Azores Islands. Presented by Hon. George H. Pickerell, United States consul. Received March 21, 1903.

9477. PISTACIA VERA. **Pistache.**

From Catania, Italy. Presented by Hon. Alexander Heingartner, United States consul, at the request of Mr. W. T. Swingle. Received March 16, 1903.

Sicilian. "From grafted pistache trees at Bronte, on the slopes of Mount Etna. The only sort likely to succeed in America for commercial purposes. Not large, with a bright-green kernel." (*Swingle.*)

9478 and 9479. TRITICUM DURUM. **Wheat.**

From Brookings, S. Dak. Received through Mr. James H. Shepard, March 14, 1903. Grown from seed originally imported from Russia.

9478.

Kubanka.

9479.

Velvet Don.

9480. CITRUS NOBILIS × CITRUS BIGARADIA. **Tangerine.**

From Mustapha, Algiers, Algeria. Presented by Dr. L. Trabut, Government Botanist. Received March 19, 1903.

Clementine.

9481. CUCURBITA sp. **Squash.**

From Mustapha, Algiers, Algeria. Presented by Dr. L. Trabut, Government Botanist. Received March 21, 1903.

Courge bedouine.

9482. TRICHILIA DREGEI.

From Delagoa Bay, Portuguese East Africa. Received through Messrs. Lathrop and Fairchild (No. 1094, February 1, 1903), March 13 and 21, 1903.

Freda. "A handsome shade tree which is being used for avenue planting and which deserves trial as a shade tree in tropical gardens and also in Florida. It grows in almost pure sand, but requires water. Its seeds may be objectionable when they fall, as they are abundant and covered with a red arillus." (*Fairchild.*)

9483.

From Johannesburg, Transvaal. Received through Messrs. Lathrop and Fairchild (No. 1108, February 18, 1903), March 24, 1903.

"An undetermined species of the sunflower family which, according to Mr. R. W. Odlam, superintendent of the Municipal Garden at Johannesburg, bears very pretty pale-yellow flowers and is worthy of being brought into cultivation. These seeds were collected by him on the high veld for the purpose of planting in his garden. They should be sown immediately upon arrival." (*Fairchild.*)

9484. Gerbera jamesoni. **Barberton or Transvaal daisy.**

From Johannesburg, Transvaal. Received through Messrs. Lathrop and Fairchild (No. 1106, February 18, 1903), March 24, 1903.

"This showy perennial is half hardy and can be grown in the open in California and the Southwest but will probably succeed as a potted plant, if set out in the summer time, even as far north as Chicago. Its flowers, which are daisy-like in shape and very large, are of a beautiful scarlet color. They are not borne in great abundance but are nevertheless very showy. The foliage, resembling slightly that of the dandelion in shape, is a deep, dark green, and the flower scapes, which rise out of a dense mass of it, are long and slender. The flower is a brilliant, attractive thing and well worthy of attention. The seeds are very short lived and should be planted at once in rich, sandy potting soil. Should germinate in ten to twelve days. The plants require plenty of water and sunshine." (*Fairchild.*)

9485. Ananas sativus. **Pineapple.**

From Durban, Natal. Received through Messrs. Lathrop and Fairchild (No. 1109, February 19, 1903), March 30, 1903.

Natal. "Sets taken from the tops of two most delicious pineapples of the common cultivated variety of Natal. More sets would be sent were it not for a disease which is prevalent among the Natal pines and which we fear to introduce into America. This disease is said to be fungous in character and to be caused by a species of Mucor which gets into the fruit through places attacked by a red mite. These two plants should be watched closely and the sets carefully examined before planting, for although they came from perfectly sound fruit they may harbor this Mucor. The Natal pineapple is a small sort of most unusual uniformity of flavor and texture and surpasses in sweetness, crispness, and freedom from fiber or seeds any other pineapple which we have ever eaten. Its small, convenient size and tenderness of flesh suit it better than any variety we have ever seen for general table use, and its excellent shipping qualities must recommend it to American growers. It has scarcely any core, and from the standpoint of the consumer it is a great pineapple. It is said to thrive with very little attention in Natal." (*Fairchild.*)

9486. Mangifera indica. **Mango.**

From Beira, Portuguese East Africa. Received through Messrs. Lathrop and Fairchild (No. 1091, January 28, 1903), April 2, 1903.

Lathrop. "The single fruit from which one of these two seeds came, and from which the following description is made, was the only one obtainable during our short stop in Beira. It was $15\frac{3}{16}$ inches in largest circumference and of a peculiar, characteristic shape; being in outline (seen from the stem end) very broadly elliptical (14 inches in circumference at base) while, seen in profile, it was heart shaped with a decided oblique tendency. It resembled in shape a Sour Sop and was nearly as large as a medium-sized specimen of this species of Anona. The skin was, when ripe, a light golden yellow and of a peculiar texture, not common to other varieties of mangoes that I have seen. It was not quite smooth but suggested the roughness of a pomelo skin. It was about one-eighth inch thick and quite tough, and on the inside it was lined with a number of long, strong fibers which did not penetrate into the flesh but adhered closely to the skin. The flesh, from this skin quite down to the short fibers attached to the seed, was entirely devoid of stringiness of any kind and had the texture of a firm custard and was of a deep golden color. In aroma it lacked very little of being as pronounced and agreeable as that of the best *Alphonse* variety of Bombay and its flesh had the indescribably rich flavor which characterizes the best varieties of this tropical fruit. The seed was small ($3\frac{3}{4}$ by $2\frac{3}{4}$ by $1\frac{1}{4}$) in proportion to the size of the fruit and the fibers attached to it are mostly about one-fourth inch long. A small bundle of fibers at one edge is 1 inch in length. This is one of the great mangoes of the world and would command fancy prices in America at any time of the year. It is fitting to name this after Mr. Barbour Lathrop, who first called it to the attention of the American public and who first introduced it into Florida. See No. 9669." (*Fairchild.*)

9487. RAPHANUS SATIVUS. **Radish.**

From Erfurt, Germany. Received through F. C. Heinemann, April 4, 1903.

Erfurt Crimson Giant. Heinemann's tender forcing radish.

9488. CITRUS HYBRIDA.

From Mustapha, Algiers, Algeria. Presented by Dr. L. Trabut, Government Botanist. Received April 11, 1903.

"Seed of a hybrid said to be of very good quality. Fruit nearly round, clear, yellow, sweet, and very juicy. Late." (*Trabut.*)

9489. CITRUS AURANTIUM × CITRUS BERGAMIA.

From Mustapha, Algiers, Algeria. Presented by Dr. L. Trabut, Government Botanist. Received April 11, 1903.

Seeds of a hybrid called by Doctor Trabut *Limorange.* A hybrid of the orange and mellarose. Said to be very good. Skin white. See No. 9554 for bud wood of same.

9490. PISTACIA VERA. **Pistache.**

From Baku, Trans-Caspian Province, Russia. Received through Mr. E. A. Bessey (October 9, 1902), April 13, 1903.

"The price of these nuts at retail in the market is 60 kopecks per pound; wholesale, 40 kopecks per pound." (*Bessey.*)

9491. PISTACIA VERA. **Pistache.**

From Tunis. Received through Mr. Walter T. Swingle (No. 125), February 21, 1903.

9492 to 9500.

From Japan. Presented by T. Tamura, of the agricultural experiment station at Okitsumachi, Shizuoka, Japan, through Messrs. Lathrop and Fairchild. Received April 16, 1903.

A collection of bud wood of Japanese fruits, as follows:

9492. PYRUS COMMUNIS. **Pear.**

9493. CITRUS JAPONICA. **Kumquat.**

Marukinkan.

9494. CITRUS JAPONICA. **Kumquat.**

Nagakinkan.

9495. CITRUS NOBILIS. **Mandarin orange.**

Aisomikan.

9496. CITRUS NOBILIS. **Mandarin orange.**

Kawahata Mikan.

9497. CITRUS sp.

Oshima Kunenbo or *Seedless Kunenbo.* "Grown on the island of Oshima, province of Osumi, prefecture Kagoshima. Fruit medium, flattened, but much larger than the common Kunenbo and very coarse. Rind thick, deep, brilliant reddish-orange color. Very fragrant. Pulp sweet, juicy, and delicious. Very good for table use and of good keeping quality." (*Tamura.*)

9492 to 9500—Continued.

9498. CITRUS AURANTIUM. **Orange.**

T. Tamura's summer orange. Originated by T. Tamura in the district of Shingai, province of Gosa, prefecture Kochi. "Fruit conical, weighing from 1½ to 2 pounds. Skin pale white and somewhat rough. Color bright yellow in the first year, changing to dull yellow the second. Fruit remains on the tree during July and August the second season. Pulp very sweet and juicy, melting and rich in fragrance, and is very palatable, although small in quantity. Contains 20 to 25 large seeds." (*Tamura.*)

9499. CITRUS NOBILIS. **Mandarin orange.**

Tamura Unshiu, or seedless mandarin orange, originated by T. Tamura, in the district of Shingai, province of Tosa. "Fruit roundish, oblate, rind thin, somewhat rough, of a bright reddish color. Pulp sweet, subacid, juicy, and seedless. This orange will not keep as well as the true sweet orange, but is one of the best for table use. The quality is very fine." (*Tamura.*)

9500. CITRUS DECUMANA. **Pomelo.**

Kawaguchi's Buntan, or seedless pomelo. Produced only in the district of Higashimorokata, in the province of Hiuga, Prefecture Miyazaki. "Fruit medium to large, very oblate, rind thin, smooth, and pale yellow. Pulp sweet, subacid, juicy, of a dull-purplish or light-reddish color, and seedless. Quality good. Excellent for table use and a good keeper." (*Tamura.*) (No. 967, July 5, 1902.)

9501 to 9503. MESEMBRYANTHEMUM sp.

From Cape Town, South Africa. Received through Messrs. Lathrop and Fairchild (Nos. 1140 to 1142, March 11, 1903), April 17, 1903.

A collection of plants presented by Mr. Eustace Pillans, of Rosebank, near Cape Town. The species were undetermined by Mr. Pillans.

9501.

"A strikingly ornamental variety with vivid orange flowers. From Mr. Eustace Pillan's garden at Rosebank." (*Fairchild.*)

9502.

"A variety with striking magenta-colored flowers. A very strong grower. Especially adapted for borders. Flowers in the early South African spring." (*Fairchild.*)

9503.

"A tricolored sort, orange, maroon, and red. Said to be very rare. It has a most striking dewlike sheen on plant and flowers. Is a strong grower." (*Fairchild.*)

9504 to 9553. MANGIFERA INDICA. **Mango.**

From Saharanpur, united provinces of Agra and Oudh, India. Received through Mr. W. Gollan, director of the Saharanpur Botanic Garden, April 17, 1903.

A collection of small grafted mango plants as follows, one plant of each variety:

9504.

Arbuthnot.

9505.

Bhabaurea.

9506.

Brindabani. (Dead on arrival.)

9507.

Bombay, green. (Dead on arrival.)

9508.

Bombay, yellow.

9509.

Gapalbhog. (Dead on arrival.)

9504 to 9553—Continued.

9510.

Khapariah.

9511.

Langra.

9512.

Malda.

9513.

Salibunda. (Dead on arrival.)

9514.

Stalkart.

9515.

Strawberry.

9516.

Sufaida.

9517.

Alfonso.

9518.

Bhurdas.

9519.

Bulbulchasm.

9520.

Calcuttia amin. (Dead on arrival.)

9521.

Chickna.

9522.

Davy's Favorite.

9523.

Faizan.

9524.

Fajri, long.

9525.

Fajri, round.

9526.

Faqirmala.

9527.

Gola.

9528.

Hatijhul.

9529.

Kachmahua.

9530.

Kakaria.

9531.

Kala.

9532.

Krishnabhog.

9533.

Khajya.

9534.

Samar Chisht.

9535.

Salamar.

9536.

Kistapal.

9537.

Lamba Bhadra.

9538.

Langra Hardoi.

9539.

Langra, large.

9540.

Maebias.

9541.

Maradabadi amin.

9542.

Nijibabadi.

9543.

Nayale.

9544.

Nucha.

9545.

Pyasee.

9546.

Ramani. (Dead on arrival.)

9547.

Sanduria.

9504 to 9553—Continued.

9548.

Sharbati, brown.

9549.

Sharbati, black.

9550.

Singapur.

9551.

Sunahra.

9552.

Surkha.

9553.

Tamancha.

9554. CITRUS AURANTIUM × CITRUS BERGAMIA.

From Mustapha, Algiers, Algeria. Presented by Dr. L. Trabut, Government Botanist. Received April 18, 1903.

Scions of a white orange, a hybrid of the mellarose and orange, said by Dr. Trabut to be of excellent quality. A description of this is published in the "Revue Hort.," of Paris; exact reference not given.

9555 to 9558. BOUGAINVILLEA spp.

From Cape Town, South Africa. Received through Messrs. Lathrop and Fairchild (Nos. 1144 to 1147, March 11, 1903), April 20, 1903.

"Four different varieties of this superb creeper have been collected by Mr. Ardern and planted on his place called the 'Hill,' at Claremont. These differ in their habit of flowering, color of bracts, and vigor, and although probably not new to America, the set is sent for comparison with sorts already known in the gardens of California." (*Fairchild.*)

9555. BOUGAINVILLEA LATERESIA (?).

Has brick-red bracts and is a vigorous grower. No. 1144.

9556. BOUGAINVILLEA SPECTABILIS.

Has very dark purple bracts. A wonderfully vigorous grower, said to excel the others in its masses of bloom, which are borne for a short period only. No. 1145.

9557. BOUGAINVILLEA GLABRA.

Has very pale, purple bracts, much more so than the two other purple varieties.

9558. BOUGAINVILLEA SANDERIANA.

"A purple-flowered kind, remarkable for its free-flowering habit. It remains in flower much of the year, and although it is not so beautiful as *B. spectabilis* when the latter is in flower, it is preferable because of its constant blooming habit." (*Fairchild.*)

9559. OLEA VERRUCOSA (?). **Wild olive.**

From Cape Town, South Africa. Received through Messrs. Lathrop and Fairchild (No. 1148, March 11, 1903), April 20, 1903.

"The native wild olive of South Africa. These cuttings were taken from a tree growing in Mr. Ardern's garden at Claremont. It may be useful for breeding or as a stock in California." (*Fairchild.*)

9560 to 9568. VITIS VINIFERA. **Grape.**

From Khodjent, Russian Central Asia. Received through Mr. E. A. Bessey, from Mr. Valneff, April 20, 1903.

A collection of grape cuttings, as follows:

9560.

Khusaine.

9561.

Sheker-Angur.

9560 to 9568—Continued.

9562.

Kadu-Khusaine.

9563.

Darai.

9564.

Chelaki.

9565.

Shuvargani.

9566.

Tagobi.

9567.

Khusaine Surkh.

9568.

Bobaki.

9569. GARCINIA sp. (?).

From Delagoa Bay, East Africa. Received through Messrs. Lathrop and Fairchild (No. 1191, February, 1903), March 21, 1903.

"Seed of a large shade tree growing everywhere about and in the town of Delagoa Bay. The tree is a pretty shade tree, vigorous grower, and an enormous fruit producer. I have seldom seen any wild fruit tree which was so loaded down as the trees of this species are with their small egg-shaped green fruits. I was not able to determine the species of this tree, but according to the surmise of Mr. J. Medley Wood, of the Botanic Gardens of Durban, it is a *Garcinia*, and for that reason, as well as for its value as a shade tree, this is worth introducing into the tropical and subtropical gardens of America. It may be possible to cross this with the mangosteen, although the difference between the species seems very great. From the sour pulp of the fruit the Kaffirs prepare a variety of fermented liquor which they keenly relish. They also eat the fruit pulp fresh." (*Fairchild.*)

9570. SOLANUM MURICATUM. **Pepino.**

From Las Palmas, Canary Islands. Received through Messrs. Lathrop and Fairchild (No. 1166, April 6, 1903), April 24, 1903.

Pera Melone. "A seedless fruit plant which is grown on the terraces of Grand Canary and the other islands of the group and on Madeira as well. The fruit tastes like a canteloupe, is the shape of an egg, and when ripe is yellow, striped with splashes of purple. The texture of the yellow flesh resembles that of a ripe pear. The hotel visitors are very fond of this fruit, and it brings a good price in the markets of the island. Here the plants are grown by irrigation and bear in nine months after being planted as cuttings. Artificial fertilizers are used in their culture and the soil is a volcanic one. The fruit may be picked before it is ripe and ripened off the bush. Small shipments have been made to London, which arrived in good condition. This was introduced into California several years ago by Dr. Gustav Eisen and is now grown there." (*Fairchild.*)

9571. AVENA sp. **Mapstone oats.**

From Pietermaritzburg, South Africa. Received through Messrs. Lathrop and Fairchild (No. 1104), April 14, 1903.

"A variety of oat which has been a very prolific yielder in numerous trials at Mapstone farm in Natal." (*Fairchild.*)

9572 to 9574.

From Brookings, S. Dak. Presented by Prof. N. E. Hansen, horticulturist of the South Dakota Agricultural Experiment Station. Received April 17, 1903.

9572. CITRULLUS VULGARIS. **Watermelon.**

Grown from S. P. I. No. 23. Named *South Dakota* by Professor Hansen.

9573. ZEA MAYS. **Corn.**

Malakoff sugar corn. Grown from seed imported by Professor Hansen from Moscow, Russia, in 1902.

9574. DAUCUS CAROTA. **Carrot.**

Kuldja carrot. Grown from S. P. I. No. 1254.

9575. MUSA SAPIENTUM.

From Las Palmas, Canary Islands. Received through Messrs. Lathrop and Fairchild (No. 1168, April 12, 1903), April 27 and May 6, 1903.

Datile. "Young buds from the base of some banana plants in Mr. Nelson's garden in Las Palmas, which the gardener says came from Cuba several years ago. The fruit of this 'date' banana is very small, not over an inch or so long, it is said, but of unusual sweetness, though inclined to be dry. This may be of use for breeding purposes. The plants are small in size and do not seem very vigorous." (*Fairchild.*)

9576. VITIS VINIFERA. **Grape.**

From Old Bokhara, Turkestan. Received through Mr. E. A. Bessey from Mr. Voronov, the representative of Mr. H. W. Dürrschmidt (No. 114, August 27, 1902), April 29, 1903.

Kishmish. "A white (i. e., very light green) seedless grape, considered to be the best of the sorts grown near Bokhara. The berry is rather small, with a slight amount of bloom, short elliptical in outline, about one-half inch long and three-eighths inch wide, very thin skinned, with a moderately firm, juicy flesh and sweet taste, modified by the presence of sufficient acid to prevent its being insipid. The bunch is large, firm, and compact, and weighs one-half a pound to a pound. I fear that if once attacked by Anthracnose, *Plasmopara*, or Black Rot, the berries are so closely packed that the whole bunch would be destroyed, as without great care in spraying it would be impossible to properly reach the inner berries of the bunch. This variety was also seen in Ashkabad, where it is said to be of Persian origin. It is rather rare here." (*Bessey.*)

9577. VITIS VINIFERA. **Grape.**

From Old Bokhara, Turkestan. Received through Mr. E. A. Bessey from Mr. Voronov, the representative of Mr. H. W. Dürrschmidt (No. 115, August 27, 1902), April 29, 1903.

Khuśaini (Khoosá-eenee). "A light-green grape, considered to be one of the best, but inferior in quality to *Kishmish*, No. 9576, and *Ok Uziúm*, No. 9578. One of the most abundant varieties on the market. Very productive. Berries light green, without bloom, often tinged with a very faint red color on the sunny side, elongated elliptical in outline, an inch to 1¼ inches long by one-half to five-eighths inch in short diameter. Usually truncated at the base and shortly rounded at the apex. Often slightly larger near the base. Seeds usually only two, situated about one-third of the distance from the base to apex (rarely central). Skin thin and tender; flesh juicy and tender, but firm. Sweet and slightly acid—too little acid for some people's taste. Bunches large (three-fourths to 1 pound or more), loose, rather long; would be easy to spray." (*Bessey.*)

9578. VITIS VINIFERA. **Grape.**

From Old Bokhara, Turkestan. Received through Mr. E. A. Bessey from Mr. Voronov, the representative of Mr. H. W. Dürrschmidt (No. 116, August 27, 1902), April 29, 1903.

Ok Uziúm (meaning *White grape*). "A white (i. e., light green) grape, very abundant on the markets of Old Bokhara. Considered by some to be of better quality than *Khuśaini*, No. 9577, but I consider it inferior. Berries light green, with bloom, round, five-eighths to three-fourths inch in diameter, with usually three rather small seeds. Skin thin but tough, and with a slightly astringent taste, which makes it necessary to avoid chewing the skin much. Flesh firm but tender and juicy, sweet but with slight acid flavor, and superior in this respect to that of *Khuśaini*, if care is taken not to chew the skin. Bunches large (1 to 1½ pounds), very compact, with a pronounced shoulder. Apparently would be difficult to spray properly, but not so difficult as *Kishmish*, No. 9576." (*Bessey.*)

9579. VITIS VINIFERA. **Grape.**

From Old Bokhara, Turkestan. Received through Mr. E. A. Bessey from Mr. Voronov, the representative of Mr. H. W. Dürrschmidt (No. 117, August 27, 1902), April 29, 1903.

Shuborgónyi. "An almost black grape with a faint bloom. Quite rare in the markets. Considered inferior to *Kishmish*, No. 9576, and *Ok Uziúm*, No. 9578. Berries elliptical, small to medium, usually one-half to five-eighths inch long by three-eighths inch thick, sometimes larger. Flesh actually almost colorless, but appearing dark on cutting open, because of the dark skin and colored layer immediately below it. Skin rather tender; only very slightly, or not at all, astringent. Flesh quite firm, juicy, and sweet. Seeds none or, if present, so tender that they are not noticeable on chewing, having no hard coat. Bunches rather small, not over one-half pound, with a pronounced shoulder, rather loose, and easy to spray. Except that it stains the fingers and mouth, I consider this variety superior to *Ok Uziúm*, No. 9578, and *Kishmish*, No. 9576." (*Bessey.*)

9580. SALSOLA ARBUSCULA.

From Chardjui, Russian Central Asia. Received through Mr. E. A. Bessey from Mr. V. Paletzky, forester, of Chardjui (No. 194, October 3, 1902), May 1, 1903.

"This plant is one of the best sand binders in this region. It forms a large shrub, or even small tree, 15 to 20 feet high. It grows without irrigation in sand in a very hot region where no rain falls from April to November. In the winter it endures severe cold. This plant can be propagated either by seed (sown from January to March) or cuttings (also planted in early spring). In either case a stand of about 40 per cent is obtained. If grown along with *Aristida pennata* var. *Karelini*, No. 9582, it seeds itself in the tufts of the latter, and soon is able to take care of its own dissemination." (*Bessey.*)

9581. HALOXYLON AMMODENDRON.

From Chardjui, Russian Central Asia. Received through Mr. E. A. Bessey from Mr. V. Paletzky, forester, of Chardjui (No. 195, October 3, 1902), May 1, 1903.

"This plant often becomes a tree 20 to even 30 feet high, with a trunk 15 to 18 inches in diameter near the base. It requires a clay subsoil which holds some moisture. It is very hard to establish, but when once started is valuable as a sand binder. It will not endure salt." (*Bessey.*)

9582. ARISTIDA PENNATA var. KARELINI.

From Chardjui, Russian Central Asia. Received through Mr. E. A. Bessey from Mr. V. Paletzky, forester, of Chardjui (No. 196, October 3, 1902), May 1, 1903.

"This grass, itself valuable as a sand binder, is especially valuable from the fact that its tufts act as shelters in which the seeds of *Salsola arbuscula* (No. 9580) and *Calligonum* sp. (Nos. 9583 to 9594) lodge and grow. Nearly every bunch of this grass will be found to have growing in it a young plant of Salsola or Calligonum. The seeds are sown in holes in the sand and covered with sand by the workman's foot, or are mixed at the rate of 1 pound to 200 or 300 pounds of sand and sown broadcast; the former method is, however, preferable. It is sown in the hollows between the sand dunes, and requires only one seeding, as the following year it reseeds itself." (*Bessey.*)

9583 to 9594. CALLIGONUM sp.

From Chardjui, Russian Central Asia. Received through Mr. E. A. Bessey from Mr. V. Paletzky, forester, of Chardjui (No. 197, October 3, 1902), May 1, 1903.

9583. CALLIGONUM ARBORESCENS and C. CAPUT-MEDUSAE.

"A mixture of these two species. These two are the best of the Calligonums for sand-binding purposes. They form small trees. They are superior to *Salsola arbuscula* in that when planted from seeds or from cuttings 90 per cent grow, inferior in that they do not reseed themselves very well." (*Bessey.*) (No. 197, October 3, 1902.)

Additional species sent by Mr. Paletzky.

9584. CALLIGONUM ACANTHOPTERUM, Borscz. var. SETOSA.

9583 to 9594—Continued.

9584a. CALLIGONUM ACANTHOPTERUM, Borscz. var. SETOSA.

9584b. CALLIGONUM ACANTHOPTERUM, Borscz. var. SETOSA.

(These three packages were kept separate because of a slight variation in the appearance of the seeds.)

9585. CALLIGONUM ARBORESCENS, sp. nov.

9586. CALLIGONUM ARBORESCENS × C. ACANTHOPTERUM.

9587. CALLIGONUM CALLIPHYSA.

9588. CALLIGONUM CAPUT-MEDUSAE.

9588a. CALLIGONUM CAPUT-MEDUSAE var. RUBICUNDA.

9589. CALLIGONUM COMOSUM.

9590. CALLIGONUM DENSUM.

9591. CALLIGONUM ERIOPODUM.

9592. CALLIGONUM MICROCARPUM.

9593. CALLIGONUM PALLASII.

9594. CALLIGONUM ROTULA.

9595. CITRUS AURANTIUM. **Orange.**

From Las Palmas, Canary Islands. Received through Messrs. Lathrop and Fairchild (No. 1171, April 14, 1903), May 1, 1903.

Telde. "Considered the finest variety in Grand Canary and superior to those grown in the central part of the island. These latter, it may be remarked, are considered by Mr. Lathrop and myself some of the finest flavored oranges which we have ever eaten, being characterized by a freedom from fiber, a crisp texture of flesh, and an indescribably vinous flavor. The variety is medium in size, thin skinned and seeded. The color of the flesh varies, but in the best specimens is a shade of dark orange. The juiciness is phenomenal, and though the fruit varies greatly in flavor and color it is uniformly good and sweet. Any collection should be glad to get this variety. Its origin is unknown as far as I can discover. The name is that of the village where the fruit is grown, some 8 miles from Las Palmas." (*Fairchild.*)

9596. CITRUS AURANTIUM. **Orange.**

From Las Palmas, Canary Islands. Received through Messrs. Lathrop and Fairchild (No. 1172, April 14, 1903), May 1, 1903.

Canary seedless. "Scions from two trees which are growing on the estate of Don Juan Rodriguez, in the famous orange region along the *Barranco de la Higuera de Canaria.* These trees are reputed to produce only fruit that is absolutely seedless, and though they are very old trees they have never, so far as we could learn, produced fruits with more than the rudiments of seeds in them. No fruits were on the trees when these cuttings were taken, so the statement as to their seedlessness is that of the renter of the place, Sig. Rivero. If this orange is seedless, as claimed, and of a quality equal to the other varieties of the same locality, as is affirmed by the cultivator, the sort is well worth thorough investigation and comparison with the navel orange now grown in California. It is, I believe, a smaller sort, and may prove superior in flavor. The excellence of these oranges from this region, which is the most noted in the islands, is attested by Mr. Lathrop, who thinks them equal to the best." (*Fairchild.*)

9597. CITRUS AURANTIUM. **Orange.**

From Las Palmas, Canary Islands. Received through Messrs. Lathrop and Fairchild (No. 1172a, April 14, 1903), May 1, 1903.

Canary seedless. "Scions of a variety of seedless orange likely to prove the same as No. 9596, but taken from a much younger tree than the latter that grew a short distance away from the two old trees mentioned under No. 9596. We have taken the liberty of naming this and the previous variety the *Canary seedless.*" (*Fairchild.*)

9598. PLOCAMA PENDULA.

From Las Palmas, Grand Canary, Canary Islands. Received through Messrs. Lathrop and Fairchild (No. 1173, April 14, 1903), May 1, 1903.

"A species of low-growing shrub which occurs wild on the slopes of the arid hillside near the road from Las Palmas to Telde. It has a most beautiful weeping habit, giving the plants the appearance of tiny weeping willows. It is not over 2½ to 3 feet high. This would be very beautiful as a cover for dry hillsides overlooking the sea. It has already been brought into greenhouse culture. I believe it will withstand severe drought." (*Fairchild.*)

9599. MANGIFERA INDICA. **Mango.**

From the Philippine Islands. Received through Prof. W. S. Lyon, in charge of seed and plant introduction, Insular Bureau of Agriculture, Manila, May 4, 1903.

"One seed of mango No. 2. The fruit from which this seed was taken weighed 16 ounces. When still wet and fresh the seed weighed only 1 ounce, making more than 93 per cent of the flesh available, exclusive of a very thin and light rind." (*Lyon.*)

9600. PHOENIX DACTYLIFERA. **Date.**

From Marseille, France. Received through Champagne Bros., Ltd, May 4, 1903, 264 pounds dried Deglet Noor dates, purchased at the request of Mr. W. T. Swingle. (No. 130.)

"Dry Deglet Noor dates from the Sahara suitable for planting. Planting is best done after the ground gets warm in April or May on alkali-free soil with abundant irrigation. This superb variety can be propagated with certainty only by means of offshoots, but as these are now very difficult to obtain, it is desirable to grow seedlings in the hope of securing some that will prove equal to the parent sort in quality. About half the seedlings are generally males and one in ten can be counted on to yield good dates. It is not unreasonable to expect that some of the seedlings may be as good as the Deglet Noor, and ripen earlier, which will permit of their culture in the Salt River Valley, Arizona." (*Swingle.*)

9601. IRIS sp.

From Monte, Grand Canary, Canary Islands. Received through Messrs. Lathrop and Fairchild (No. 1174, April 17, 1903), May 4, 1903.

"A very beautiful white iris of unusual size (5 inches in diameter), which is fragrant. This grows wild in certain barrancos of Grand Canary, and Mr. Alaricus Delmard, of Monte, called it to our attention. He sent plants to English florists who declared it was new, but the plants failed to live. Its great size and the purity of its white color and its delicate perfume, like that of a lily, make it a desirable introduction, although specifically it may not be new to America." (*Fairchild.*)

9602. HEDERA HELIX var. CANARIENSIS. **Ivy.**

From Monte, Grand Canary, Canary Islands. Received through Messrs. Lathrop and Fairchild (No. 1175, April 17, 1903), May 4, 1903.

"An exceedingly vigorous, very large-leaved variety of ivy, which grows wild in the Canary Islands. The leaves are sometimes 6 to 8 inches across. It may not retain this character of large leaves, but it is worthy of trial or for breeding purposes." (*Fairchild.*)

9603. DRACUNCULUS CANARIENSIS.

From Monte, Grand Canary, Canary Islands. Received through Messrs. Lathrop and Fairchild (No. 1176, April 17, 1903), May 4, 1903.

"A giant aroid with spathes sometimes 14 to 16 inches long. Yellowish or greenish in color. Leaves deeply lobed and ornamental. Grows 6 to 8 feet in height in moist places in the mountains of Grand Canary. Might prove useful for breeders of the calla lily because of its large size. This was called to our attention by Mr. A. Delmard, of Monte." (*Fairchild.*)

9604. PORTULACARIA AFRA. **Spek-boom.**

From Cape Town, South Africa. Received through Messrs. Lathrop and Fairchild (No. 1130, March 8, 1903), May 6, 1903.

Spek-boom. "This bush, which grows sometimes 12 to 15 feet high, forms one of the most valuable fodder elements of the northeastern Karroo, in Cape Colony. It is a succulent-leaved species, greedily eaten by horned stock, and well worth thorough trial in the frostless, dry lands of our southwestern States. The cuttings should be placed in the hands of the gardeners of a few interested ranch owners and at the experiment stations in the States where the plant is likely to prove of value, with the understanding that they are to be grown and multiplied and small patches of mother plants started from which cuttings can be taken. The cuttings and young plants must be protected from gophers, rats, mice, or prairie dogs until several years old. At least the mother plantations should be so protected. This is not a desert plant, but simply a species which has the power to withstand a long, dry season, and because of the avidity with which live stock eat its leaves and stems it is worth acclimatizing in the frostless regions of America. It thrives best on rocky slopes and needs protection from the wind by wind-breaks. These cuttings were made from a tree growing in the grounds of the South African Museum, in Cape Town, which tree was planted many years ago by Professor MacOwan. They are a gift to the American ranchman from this veteran Cape botanist who has done so much to call attention to the good qualities of the *Spek-boom.* The climate of the region in which the tree lives is illustrated by these figures: Absolute maximum temperature for ten years (1881–1890), 108° F., absolute minimum, 21° F. Rainfall average for ten years, 18.76 inches per annum, occurring in the warm season." (*Fairchild.*)

9605. PORTULACARIA AFRA.

From Oatlands, South Africa. Received through Messrs. Lathrop and Fairchild (No. 1155, March 16, 1903), May 6, 1903.

Spek-boom. "These cuttings came from the typical Karroo, where the plant is highly prized for fodder purposes. It may prove slightly different from those taken from a tree in Cape Town, No. 9604. These cuttings were collected by Mr. Nash, of the Cape department of agriculture, and secured through Mr. Davison, chief sheep inspector of the department." (*Fairchild.*) (For description see No. 9604.)

9606. ANANAS SATIVUS. **Pineapple.**

From Lower Albany, Trapps Valley, South Africa. Received through Messrs. Lathrop and Fairchild (No. 1154, March 16, 1903), May 6, 1903.

Natal. "This is evidently the same variety of pineapple as No. 9485. Fresh pineapples from this region which we tested were not as fine flavored as those we ate in Natal, but the fact that they had been picked green should be taken into consideration. Should it grow as well in Florida as it does here it would prove a great success. Secured through the kindness of Mr. Eustace Pillans, agricultural assistant of Cape department of agriculture, from C. J. Ansley, Trapps Valley, Cape Colony." (*Fairchild.*)

9607. VITIS RUPESTRIS var. METALLICA. **Grape.**

From Cape Town, South Africa. Presented by the Cape department of agriculture through Messrs. Lathrop and Fairchild (No. 1137, March 10, 1903). Received May 6, 1903.

"A resistant American stock of South African origin, which has proved itself most admirably suited to the conditions at the Cape, and especially adapted to 'any loose soil, loam, gravel, or sand, and also in dry, open heavy soils; it can, besides, stand a fair amount of moisture in loose soils. It forms an excellent graft-bearer for all varieties of European vines, except *Hanepoot*, and possibly also other members of the *Muscat* family.' (cf. J. P. de Waal, in the Agricultural Journal, Cape of Good Hope, December 19, 1901, p. 838.) This variety, I am informed by Mr. Eustace Pillans, is the best of all the resistant stocks yet tried at the Cape, as its ease of grafting, great vigor, suitability to different kinds of soil, and grafting affinity for all but varieties of the *Muscat* type, make it a general stock of great value. Even those who do not claim that it exceeds in vigor any other sort, admit that it is the easiest grafted of any of the American stocks. The stock originated at Groot Constantia Wine Farm in a lot of seedlings from seed sown in 1886. It is uncertain whether the seed came direct from America or from France. This is entirely distinct, according to Mr. J. Bioletti (formerly of Berkeley University, California, now at Elsenburg Agricultural School), from the *Metallica* of French vineyardists. Its name applies to the luster of its foliage. The seedling was picked out in 1894, and by quick propagation in 1901 yielded 687,000 cuttings, and in 1902, 864,000 cuttings were distributed. It has been tested side by side with many French stocks, such as *Aramon rupestris*, *Riparia Gloire de Montpellier*, etc., and takes its place as their equal in all points and their superior as regards ease of propagation and suitability to the varieties of soil mentioned. Mr. Pillans goes so far as to predict that it will drive all other stocks out of South Africa, except for *Muscat* sorts. He claims for it a remarkable yield-giving power, extreme vigor, and resistance to the phylloxera. Mr. Bioletti admits its excellent qualities and practical growers are enthusiastic over it. This is well worth the serious consideration of Californian vine growers. The originators of this remarkable seedling are Messrs. J. P. de Waal and Eustace Pillans, of the Cape of Good Hope department of agriculture, and its trial in California should be made at once. We are indebted to Mr. Pillans for the plants sent." (*Fairchild.*)

9608. CHLORIS VIRGATA. **Rhodes grass.**

From Cape Town, South Africa. Received through Messrs. Lathrop and Fairchild (No. 1131, March 8, 1903), May 6, 1903.

"A species of pasture grass that, although scattered widely through the Tropics of both hemispheres (according to the books), has probably not before been brought into culture. Mr. Cecil Rhodes had the seed of this plant collected several years ago and sown in large patches on his place near Cape Town, called 'Groote Schur.' The grass has done well there, forming heavy sods of a good herbage, and the manager of Mr. Rhodes's farm has had the seed collected and distributed among the planters of the colony, by whom it is called 'Rhodes grass.' From what I saw of these patches on the slopes of a hillside, I do not believe this is a drought resistant form; at least it is not able to withstand very severe dry weather. It has the typical finger-like inflorescence of the genus and its strong, tough, creeping stems lie flat on the ground. When given sufficient moisture the grass is said to produce a mass of forage over 2 feet high, but what it would do if subjected to severe drought has yet to be found out. I saw a single patch which had been sown with the seed and had failed to take, and it was evident that the drought-resisting powers of the plant are quite limited. However, a grass which has attracted the attention of so keen a cultivator as Mr. Rhodes and is meeting with favorable comment from many practical men here at the Cape deserves a thorough trial in America. As the species is a perennial it need only be tested in frostless or nearly frostless regions. Its fodder value will be much inferior to alfalfa, but it will thrive on soil with little lime in it. This seed was given Mr. Lathrop for distribution in America by the steward of Mr. Rhodes's estate, and in case it succeeds, the Chartered South African Company, at Cape Town, should be notified of the success it attains." (*Fairchild.*)

9609. TRITICUM JUNCEUM.

From Cape Town, South Africa. Received through Messrs. Lathrop and Fairchild (No. 1136, March 9, 1903), May 6, 1903.

"A grass which is a native of North Africa and Europe, and is used as a sand binder here in Cape Colony. Mr. Hutchins, conservator of forests of the colony, to whom we are indebted for the seed, has found this species especially serviceable in experiments near the seashore. Von Müller remarks that it is one of the best grasses to keep rolling sand ridges together. Probably this has already been tried in America, but this South African seed may be of a different strain." (*Fairchild.*)

9610. MUSA SAPIENTUM. **Banana.**

From Las Palmas, Grand Canary, Canary Islands. Received through Messrs. Lathrop and Fairchild (No. 1169, April 12, 1903), May 6, 1903.

Manzana or *Silver.* "Young shoots from the base of a few plants of the *Silver* banana of Madeira, which variety is thought by the residents of this island to be a very superior sort and to have originated in Madeira. The fruits which we tasted were good, but not remarkable. They had an acid flavor, were juicy, had light-colored flesh, and though very refreshing as a change from the ordinary type of banana, were not especially to be recommended." (*Fairchild.*)

9611. STRYCHNOS SPINOSA (?) **Kafir orange.**

From Mozambique, East Africa. Received through Messrs. Lathrop and Fairchild (No. 1103, February 8, 1903), May 6, 1903.

"Seed (*poisonous*) of the Kafir orange, a native fruit of Portuguese East Africa. The tree is grown in Delagoa Bay only occasionally, and the Kafirs crack open the calabash-like fruit and eat the brown, plum-like flesh which surrounds the many flat angular seeds. These seeds are *said to be very poisonous*, but the flesh is quite refreshing. That of the specimen which we tasted was like a brandied peach into which cloves had been stuck. The spicy aroma of the fruit is perceptible before the hard shell has been broken open and forms one of its best characteristics. The fruits are cannon ball shaped and very heavy, and the green shell is so hard that it has to be broken with a heavy blow. It is in many ways a remarkable fruit, and although the data regarding it are meager it is well worth a place in Porto Rico, Florida, and Hawaiian gardens." (*Fairchild.*)

9612. CARISSA ARDUINA.

From Cape Town, South Africa. Received through Messrs. Lathrop and Fairchild (No. 1110, February 26, 1903), May 6, 1903.

"A beautiful, thorny, evergreen shrub, suited to frostless regions. It would be suited for hedge making and as an ornamental, for its white flowers and oblong, bright red fruits show off strikingly against its dark-green foliage. Like *Carissa grandiflora*, its fruits, resembling a large barberry fruit, are good to eat, having a sweet, fresh, but somewhat characterless taste. Standing alone this species produces a prettier shaped shrub than *C. grandiflora* and is well worth the attention of gardeners in California and Florida. These seeds are from fruit gathered in the municipal gardens in Cape Town. Breeders should be encouraged to try crossing these two species. There are other representatives of the genus in South Africa which might be used in breeding experiments. *C. acuminata*, A. D. C., is listed for Natal by J. Medley Wood in his 'Indigenous Plants of Natal;' von Mueller lists *C. brownii*, F. V. M., from East Australia, and *C. carandas* L., from India to China. All these species have edible fruits." (*Fairchild.*)

9613. MEDICAGO ARBOREA. **Tree lucern.**

From Cape Town, South Africa. Received through Messrs. Lathrop and Fairchild (No. 1111, March 3, 1903), May 6, 1903.

"Seed of the *Tree lucern*, which is said to occur in southern Europe, especially in Greece. It is, according to von Mueller in his 'Extra Tropical Plants,' page 300, the 'Cytisus' of the ancient Greeks and Romans. The plant forms a shrub 7 to 8 feet high with thick, woody stems 3 inches in diameter, which sprawl more or less over the ground. These seeds are from a single specimen in the Municipal Gardens at Cape Town, and Professor MacOwan informs me that the plant has not attracted much attention here as a fodder plant, though it grows well. For plant breeders only who are at work on the genus *Medicago*." (*Fairchild.*)

9614. SOLANUM sp.

From Cape Town, South Africa. Received through Messrs. Lathrop and Fairchild (No. 1112, March 3, 1903), May 6, 1903.

"Seed of a tree *Solanum*, of decided ornamental value, which is growing in the Municipal Gardens at Cape Town and which has never been specifically determined.

Its origin also is not known, according to Professor MacOwan. It should be sent for trial to the frostless regions of America and distributed among the superintendents of parks and public gardens and private ornamental plant growers. Its upright stem, spiny, broad leaves, and horizontal branches make it effective." (*Fairchild.*)

9615. PORTULACARIA AFRA.

From Cape Town, South Africa. Preseoted by Prof. P. MacOwan, Government Botanist, through Messrs. Lathrop and Fairchild (No. 1113. Received March 3, 1903), May 6, 1903.

Spek-boom. "Seed of this interesting fodder plant. (See Nos. 9604, 9605.)" (*Fairchild.*)

9616. HARPEPHYLLUM CAFFRUM. **Kafir plum.**

From Cape Town, South Africa. Presented by Prof. P. MacOwan, Government Botanist, through Messrs. Lathrop and Fairchild (No. 1114, March 5, 1903). Received May 6, 1903.

"One of the prettiest evergreen shade trees to be seen in the gardens of Cape Town. Prof. P. MacOwan has planted a row of these trees in a very windy situation near the parliament buildings in Cape Town and they are admirably suited to such a trying situation, where they are whipped by continuous winds which blow from various directions. Professor Sim remarks that its timber resembles mahogany and is used for wagon making, being called *eschenhout* by the Dutch. The red, showy drupes are suitable for preserves, but in the Cape they are apparently not popular though they have a pleasant acid taste, but little pulp. The branches are sometimes planted as fence poles and these large 'cuttings' take root and form trees. [*Sim.*] Professor MacOwan recommends this heartily as a shade tree for windy situations, where its beautiful dark green foliage forms a dense shade. The tree will thrive in the frostless belt of California and Florida and is sure to be appreciated by owners of parks as an avenue plant. The seeds should be sown in a seed bed and plants transplanted to situations desired. It is not a desert plant, but will stand some drought. This tree is worthy a prominent place in the gardens and parks of California and Florida." (*Fairchild.*)

9617. SOLANUM ACULEASTRUM. **Natal thorn.**

From Cape Town, South Africa. Presented by Prof. P. MacOwan, Government Botanist, through Messrs. Lathrop and Fairchild (No. 1115, March 8, 1903). Received May 6, 1903.

"An ornamental species with very large fruits, grows 6 feet high if grown singly or 4 to 4½ feet if in a hedge, for which latter purpose it is used by the farmers. Very acutely hook-thorned, rather disposed to use up too much space if left alone. The fruit is the size of a mandarin orange. It will not bear more than a short and slight frost. To be sent to Texas, Arizona, and California gardens." (*Fairchild.*)

9618. PASPALUM DIGITARIA.

From Cape Town, South Africa. Presented by Prof. P. MacOwan, Government Botanist, through Messrs. Lathrop and Fairchild (No. 1128, March 8, 1903). Received May 6, 1903.

"Seed of a grass, which, according to Prof. P. MacOwan, is promising for moist bottom land. It will not endure cold weather, but is suited to subtropical conditions." (*Fairchild.*)

9619. PENTZIA VIRGATA.

From Cape Town, South Africa. Presented by Prof. P. MacOwan, Government Botanist, through Messrs. Lathrop and Fairchild (No. 1129, March 9, 1903). Received May 6, 1903.

"Old seed of the fodder bush called the *Goed Karroo.* This is the best plant in the Karroo for sheep pasturage, for it furnishes good fodder, binds the sand, preventing gullying, and withstands drought. (*Fairchild.*)

9620. EUCLEA RACEMOSA.

From Cape Town, South Africa. Presented by Prof. P. MacOwan, Government Botanist, through Messrs. Lathrop and Fairchild (No. 1132, March 9, 1903). Received May 6, 1903.

"A shrub with dense, dark-green foliage, of distinctly ornamental appearance, which is especially suited for plantings near the sea that are exposed to salt spray, with the purpose of lifting the wind from the surface of the soil and checking the shifting of the sands. In experiments of fixing sand dunes this plant may prove of decided value, not so much through the action of its roots as by the formation of a cover for the sand, which will lift the wind above its surface. Strongly recommended by Professor MacOwan in his recommendations to the Cape government on the rebushing of an overstocked island off the coast called Robbin Island. This seed should be planted in a seed bed and the young plants set out when of sufficient size to bear transplanting well." (*Fairchild.*)

9621. MYOPORUM INSULARE.

From Cape Town, South Africa. Presented by Prof. P. MacOwan, Government Botanist, through Messrs. Lathrop and Fairchild (No. 1133, March 8, 1903). Received May 6, 1903.

"An extra tropical Australian tree called in South Africa *Australian blueberry*, and used there as a hedge plant or as an ornamental tree. It is proof against sea breezes, can be propagated by cuttings, grows rapidly, and will thrive down to high-tide mark. It is one of the few trees which will grow in wet saline soil. The wood is close grained and good for cabinet making. (*Fairchild.*)

9622. COTYLEDON TERETIFOLIA.

From Cape Town, South Africa. Presented by Prof. P. MacOwan, Government Botanist, through Messrs. Lathrop and Fairchild (No. 1134, March 8, 1903). Received May 6, 1903.

"Seeds of a *Cotyledon* from Grahamstown, Great Kirch River. This is a hothouse plant." (*Fairchild.*)

9623. CEPHALANDRA QUINQUILOBA.

From Cape Town, South Africa. Received through Messrs. Lathrop and Fairchild (No. 1135, March 8, 1903), May 6, 1903.

"A cucurbitaceous plant of ornamental value, running over the ground and bearing pretty yellow flowers and red fruits. It should be tried in southern California as an arbor plant mixed with other more dense shade-giving species. Probably a tender species." (*Fairchild.*)

9624. EUCALYPTUS FICIFOLIA.

From Cape Town, South Africa. Received through Messrs. Lathrop and Fairchild (No. 1157, March 16, 1903), May 6, 1903.

"Seed from some trees growing on Cecil Rhodes's place, Groote Schur. I have never seen in any landscape more gorgeous dashes of color than those produced by these trees when in bloom. The colors vary from salmon or pale pink to deep scarlet. This tree is probably known in California, perhaps under another specific name." (*Fairchild.*)

9625. PITTOSPORUM PENDULUM.

From Cape Town, South Africa. Received through Messrs. Lathrop and Fairchild (No. 1158, March 16, 1903), May 6, 1903.

"Seed of a remarkably grotesque tree growing in the municipal gardens at Cape Town. It has long slender branches which hang like those of a weeping willow. Its trunks are weird and irregular in form and give to the tree a most singular appearance. This is worthy of trial in such parks as the Golden Gate Park, of San Francisco." (*Fairchild.*)

9626. CUCURBITA MELANOSPERMA. **Squash.**

From San Antonio, Malta. Received through Messrs. Lathrop and Fairchild (No. 1159, December 27, 1902), May 6, 1903.

"Dr. Giovanni Borg, director of the gardens at San Antonio, called our attention to this squash as the best one for soups and as a vegetable which he had ever tested on the island. The plant also grows luxuriantly in Madeira, where it is highly prized as a vegetable. Doctor Grabham, of Funchal, remarked that it formed one of the principal foods of the native poor people. It should be given a good test by seedsmen." (*Fairchild.*)

9627. LUPINUS ALBUS (?).

From Tripoli or Tunis. Received through Messrs. Lathrop and Fairchild (No. 1160, December 1902), May 6, 1903.

"A few peculiar lupines picked up either in Tunis or Tripoli. They may be of interest to those experimenting with this plant as a green manure crop." (*Fairchild.*)

9628 to 9631. **Ornamentals.**

From Cape Town, South Africa. Received through Messrs. Lathrop and Fairchild (Nos. 1162 to 1165, March 16, 1903), May 6, 1903.

Seed of several ornamentals presented by Mr. H. J. Chalvin, superintendent of the municipal gardens at Cape Town, as follows:

9628. COTYLEDON sp.

Various species. Mixed seed. (No. 1162.)

9629. ASPARAGUS PLUMOSUS.

(No. 1163.)

9630. GASTERIA CROUCHERI.

(No. 1164.)

9631. MORAEA PAVONIA.

(No. 1165.)

9632 and 9633.

From Port Elizabeth district, South Africa. Received through Messrs. Lathrop and Fairchild, May 6, 1903.

9632. EUPHORBIA CORONATA.

A few seeds.

9633. LEUCADENDRON ARGENTEUM. **Silver tree.**

"Planted in a pot closely and allowed to grow up thickly, the silver tree is said to form a very pretty pot plant. Difficult to transplant." (*Fairchild.*)

9634. ANANAS SATIVUS. **Pineapple.**

From Trapps Valley, South Africa. Received through Messrs. Lathrop and Fairchild (No. 1156, March 16, 1903), May 15, 1903.

Natal. "These are probably in no way different from No. 9606, and were intended to be shipped with them, but arrived too late. Secured through the kindness of Prof. C. P. Lounsbury, entomologist of the Cape department of agriculture, from a plantation near Trapps Valley.

9635 to 9660. GOSSYPIUM BARBADENSE. **Egyptian cotton.**

From Egypt. Received through Mr. Thomas H. Kearney, May 16, 1903.

9635.

Extra Fine Mit Afifi. Purchased from Robin Carver, Kafr-el-Zayat.

9636.

Ashmuni. Purchased from Carver Brothers & Co., Beni-Suef.

9635 to 9660—Continued.

9637 to 9660.

Purchased from Choremi Benachi & Co., Alexandria.

9637.

Mit Afifi. First picking, from Behera Province.

9638.

Mit Afifi. Second picking, from Behera Province.

9639.

Mit Afifi. From Charkieh Province.

9640.

Mit Afifi. From Dakahlieh Province.

9641.

Mit Afifi. From Kalioubieh Province.

9642.

Mit Afifi. First picking, from Kaliuobieh Province.

9643.

Mit Afifi. First picking, from Gharbieh Province.

9644.

Mit Afifi. Second picking, from Gharbieh Province.

9645.

Mit Afifi. First picking, from Menufieh Province.

9646.

Jannovitch. First picking, from Behera Province.

9647.

Jannovitch. From Charkieh Province.

9648.

Jannovitch. From Dakahlieh Province.

9649.

Jannovitch. First picking, from Gharbieh Province.

9650.

Jannovitch. Second picking, from Gharbieh Province.

9651.

Abbasi. First picking, from Behera Province.

9652.

Abbasi. Third picking, from Behera Province.

9653.

Abbasi. From Charkieh Province.

9654.

Abbasi. From Dakahlieh Province

9635 to 9660—Continued.

9637 to 9660—Continued.

9655.

Abbasi. Third picking, from Kalioubieh Province.

9656.

Abbasi. Second picking, from Kalioubieh Province.

9657.

Abbasi. First picking, from Gharbieh Province.

9658.

Abbasi. Second picking, from Gharbieh Province.

9659.

Abbasi. First picking, from Menufieh Province.

9660.

Abbasi. Second picking, from Menufieh Province.

9661 and 9662. **Ornamentals.**

From Funchal, Madeira. Received through Messrs. Lathrop and Fairchild (Nos. 1177 and 1178, April 21, 1903), May 18, 1903.

9661. STREPTOSOLON JAMESONII.

"This is one of the showiest flowering shrubs I have ever seen. It is a native of South Africa and there and in Madeira the bushes are covered with dense masses of yellow and orange colored blooms. Already known in California." (*Fairchild.*) (No. 1177.)

9662. BIGNONIA CHAMBERLAYNII.

"A beautiful lemon yellow flowering species, which grows to perfection here on walls and trellises. It is covered with masses of big trumpet-shaped flowers." (*Fairchild.*) (No. 1178.)

9663. PERESKIA ACULEATA.

From Funchal, Madeira. Received through Messrs. Lathrop and Fairchild (No. 1183, April, 1903), May 18, 1903.

"Cuttings of this member of the cactus family, which is used for a stock on which to graft cacti. As a stock it is well known, but as an ornamental climber probably less well known. In Funchal a single plant, 3 years old, had covered the front fence of a private house with a wealth of beautiful foliage. It was loaded with one-seeded fruits, which, though edible, had little taste. Already known in California." (*Fairchild.*)

9664. CANARINA CANARIENSIS (?).

From Funchal, Madeira. Received through Messrs. Lathrop and Fairchild (No. 1185, April, 1903), May 16, 1903.

"Seed of a pretty creeper, native of the Canaries and deriving its generic name from the islands. It has luxuriant light-green foliage and bears bell-shaped orange-red flowers which are quite showy. It requires much moisture and grows naturally in shaded valleys of the Canaries. These seed came from the villa of Mr. Reid, some distance above the town of Funchal, in Madeira. Should thrive in Florida and possibly in southern California. Sometimes grown as a hothouse plant." (*Fairchild.*)

9665. CANNABIS SATIVA. **Hemp.**

From Yokohama, Japan. Received through The Yokohama Nursery Company, 21–35 Nakamura, Yokohama, Japan, May 20, 1903.

Aizu.

9666 and 9667.

From Surat Government farm, India. Received May 11, 1903.

9666.

Unnamed seed.

9667. ORYZA SATIVA. **Rice.**

9668. HELIANTHUS ANNUUS. Sunflower.

From Moscow, Russia. Received through Mr. E. A. Bessey from E. Immer & Son, May 22, 1903.

White-seeded variety, grown for oil making.

9669. MANGIFERA INDICA. Mango.

From Beira, Portuguese East Africa. Received through Messrs. Lathrop and Fairchild (No. 1089, January 28, 1903), May 25, 1903.

Lathrop. "During a trip down this East African coast seven years ago, Mr. Lathrop found at Beira a few mangoes of such extraordinarily fine quality that he has often spoken of them as a possibly valuable present to the mango growers of America. We reached Beira at the end of the season for this mango and could only secure one fruit of it to test and one seed of another fruit. The fruit eaten, which was given us by the American consul, Mr. Glenny, was of exquisite flavor and as free from fiber as a firm custard. The seed of this fruit and the other seed of the same variety are labeled No. 1091, L. & F., S. P. I. No. 9486. The following scanty information was obtainable about this mango: On the island of Chiloane, some 60 miles south of Beira, a monastery was established by the Portuguese several centuries ago. This monastery has been abandoned for many years, a century or more, we are told. Long after that time some fishermen found mango trees growing in the abandoned garden of the once monastery and brought the fruit to Beira. Since then small lots of this fruit are brought from Chiloane by any fishing boat passing during the mango season. The repute of this mango has spread along the African coast as being far superior to any other variety grown there. So far as we could learn no effort has been made to introduce the plant to the mainland, except in the instance of a single young tree in Beira grown from a seed. The sample we ate was delicious in flavor, delicate in texture, and of large size. This variety was named after Mr. Barbour Lathrop, its discoverer and first introducer into America." (*Fairchild.*)

9670 to 9699. MANIHOT sp. Cassava.

From Robert Thomson, Half Way Tree, Jamaica. Purchased on the recommendation of Prof. P. H. Rolfs. Received May 7, 1903.

9670.

Pacho No. 1.

9671.

Pacho No. 2.

9672.

Pacho No. 3.

9673.

Pacho No. 4.

9674.

Heleda No. 1.

9675.

Heleda No. 2.

9676.

Heleda No. 3.

9677.

Heleda No. 4.

9678.

Heleda No. 5.

9679.

Heleda No. 6.

9680.

Heleda No. 7.

9681.

Rio (Pie?) de Paloma.

9682.

Negrita No. 1.

9683.

Negrita No. 2.

9670 to 9699—Continued.

9684.

Negrita No.

9685.

Negrita No. 4.

9686.

Blancita.

9687.

Cajon amarilla.

9688.

Notoseves.

9689.

Cabasa dura.

9690.

Pie de perdig.

9691.

Cenaguera.

9692.

Chingele.

9693.

Manteca.

9694.

Lingua de Venada.

9695.

Solita amarilla.

9696.

Mantera.

9697.

Cantabriera.

9698.

Solita blanca.

9699.

Bitter.

9700 to 9732.

From Jamaica. Received through Prof. P. H. Rolfs, May 7, 1903.

A collection of scions as follows:

9700. CITRUS AURANTIUM. **Tangerine.**

"A tangerine seedling, secured at Porus, Jamaica. An extra large variety, nearly as large and equally as good flavored as the *King*, ripening earlier, and of a much finer color." (*Rolfs.*)

9701. CITRUS AURANTIUM. **Tangerine.**

"A tangerine very similar to No. 9700, but ripening somewhat later." (*Rolfs.*)

9702. CITRUS AURANTIUM. **Navel tangerine.**

"Similar to No. 9700 in size, color, and general make-up of the fruit, but being seedless and producing a small accessory orange, as in the case of the Washington navel; otherwise being of the distinct tangerine type." (*Rolfs.*)

9703. MANGIFERA INDICA. **Mango.**

Alfoos. "This mango was introduced from India to Jamaica about fifteen years ago, and is considered to be one of the finest of the East Indian varieties." (*Rolfs.*)

9704. MANGIFERA INDICA. **Mango.**

Bombay. "The tree from which the scions were obtained was ripening fruit in winter. The fruit weighed about three-fourths of a pound. Very luscious and producing very little fiber. Altogether a superior mango." (*Rolfs.*)

Cuttings as follows:

9705. HIBISCUS SINENSIS.

"A beautiful ornamental of unusual appearance, producing a rose-colored flower." (*Rolfs.*)

9700 to 9732—Continued.

9706. HIBISCUS SINENSIS.

"Another beautiful *Hibiscus* with very dark center and yellow outer portions of the petal." (*Rolfs.*)

9707. BOUGAINVILLEA SPECTABILIS var. LATERITIA (?).

"One of the most showy decorative plants for the lawn. The orange-colored bracts produce a very pleasing contrast with the dark-green background." (*Rolfs.*)

9708. THUNBERGIA GRANDIFLORA.

"A large flowering vine, very useful for arbor and house decoration." (*Rolfs.*)

9709. THUNBERGIA HARRISSII.

"A beautiful arbor plant." (*Rolfs.*)

9710. THUNBERGIA LAURIFOLIA.

"A beautiful plant for covering arbors and sides of houses." (*Rolfs.*)

9711. RUPPELIA GRATA.

"An ornamental, producing very striking and pleasing effects on an arbor." (*Rolfs.*)

9712. POINSETTIA sp.

"An especially fine extra double race of this variety." (*Rolfs.*)

9713. PASSIFLORA QUADRANGULARIS.

"The granadilla of the Tropics, bearing large fruit the size of an ostrich egg, the inner pulp of which has a very pleasant subacid flavor." (*Rolfs.*)

9714. PETREA VOLUBILIS.

"An arbor ornamental of extra good qualities, making a dense shade and producing a profusion of flowers." (*Rolfs.*)

9715. BEAUMONTIA GRANDIFLORA.

"A vine of large proportions, producing an immense white bloom, the tips of the corolla being pink. A valuable climbing plant for out-of-doors." (*Rolfs.*)

Seeds as follows:

9716. COFFEA ARABICA.

"A variety of this species growing in a higher altitude and producing fruit of an extraordinarily good quality." (*Rolfs.*)

9717. CLITORIA sp.

"A peculiarly crested form of this plant which makes an excellent plant for covering a lattice." (*Rolfs.*)

9718. LUFFA AEGYPTICA.

"A dishcloth gourd, the inner parts of which produce a fibrous material useful for various culinary purposes." (*Rolfs.*)

9719. CANANGA ODORATA (?). **Ilang-Ilang.**

"Seed produced from tree growing in Jamaica." (*Rolfs.*)

9720. HURA CREPITANS. **Sand box.**

"Useful for shade and ornamental purposes." (*Rolfs.*)

9721. ACROCOMIA sp.

"This species produces nuts that are used like hickory nuts and are most excellent." (*Rolfs.*)

9700 to 9732—Continued.

9722. OREODOXA OLERACEA. **Mountain palm of Jamaica.**

"A very handsome ornamental plant." (*Rolfs.*)

9723. SABAL sp. **Cuban sabal.**

"A very sturdy, big-trunked tree." (*Rolfs.*)

9724. LIVISTONA HOOGENDORPII.

"An ornamental palm." (*Rolfs.*)

9725. SABAL ADANSONI.

"A dwarf palmetto." (*Rolfs.*)

9726. PANDANUS VANDERMESCHII.

9727. ARECA ALICAE.

9728. COCOS BOTRYOPHORA.

9729. LIVISTONA ROTUNDIFOLIA.

9730. PANDANUS UTILIS.

9731. ROYSTONIA REGIA.

"Is supposed to be distinct from the Porto Rico and Florida royal palm, making a tree of much grander stature." (*Rolfs.*)

9732. ANANAS SATIVUS. **Pineapple.**

"Seedling pineapple plants." (*Rolfs.*)

9733. SECHIUM EDULE. **Chayote.**

From San Juan, P. R. Presented by Miss Jennie H. Ericson. Received June 1, 1903.

9734 to 9749. MEDICAGO spp.

From Madrid, Spain. Received through Messrs. Lathrop and Fairchild (No. 1189, a to p, May, 1903), June 1, 1903.

"The Botanic Gardens of Madrid have represented in their collection a large number of grasses and fodder plants, and the head gardener, Mr. Luis Aterido, has kindly furnished us with a collection of seeds of sixteen species of *Medicagos*, some of which may prove of value for breeding purposes. They are as follows:

9734. MEDICAGO LUPULINA.

9735. MEDICAGO RIGIDULA.

9736. MEDICAGO GERARDI.

9737. MEDICAGO LACINIATA.

9738. MEDICAGO INTERTEXTA.

9739. MEDICAGO DISCIFORMIS.

9740. MEDICAGO ORBICULARIS.

9741. MEDICAGO TENOREANA.

9742. MEDICAGO TUBERCULATA.

9743. MEDICAGO MUREX.

9744. MEDICAGO PRAECOX.

9745. MEDICAGO SUFFRUTICOSA.

9746. MEDICAGO RADIATA.

9747. MEDICAGO CILIARIS.

9748. MEDICAGO FALCATA.

9749. MEDICAGO SCUTELLATA.

"Among these, several are indigenous to Spain and all of them have a greater or less value as fodder plants. They are mostly annuals, however, and are therefore limited in value for direct use." (*Fairchild.*)

9750 to 9774. Trifolium spp.

From Madrid, Spain. Received through Messrs. Lathrop and Fairchild (No. 1190, May, 1903), June 1, 1903.

"Small packets of seeds from the Botanic Gardens of Madrid (see Nos. 9734 to 9749). These are for the use of anyone who is especially interested in breeding *Trifoliums.*" (*Fairchild.*) They are as follows:

9750. Trifolium angustifolium.

9751. Trifolium arvense.

9752. Trifolium bonanii.

9753. Trifolium cherleri.

9754. Trifolium diffusum.

9755. Trifolium fragiferum.

9756. Trifolium glomeratum.

9757. Trifolium hispidum.

9758. Trifolium incarnatum.

9759. Trifolium lappaceum.

9760. Trifolium maritimum.

9761. Trifolium medium.

9762. Trifolium montanum.

9763. Trifolium ochroleucum.

9764. Trifolium panormitanum.

9765. Trifolium pratense.

9766. Trifolium repens.

9767. Trifolium resupinatum.

9768. Trifolium rubens.

9769. Trifolium spumosum.

9770. Trifolium striatum.

9771. Trifolium strictum.

9772. Trifolium subterraneum.

9773. Trifolium tomentosum.

9774. Trifolium vesiculosum.

9775.

From Honduras. Presented by Mr. Frank Dean, Black River. Received June 1, 1903.

"One large seed of Oracco; a fine fruit, like the Maumee sapota." (*Dean.*)

9776. Palm.

From Honduras. Presented by Mr. Frank Dean, Black River. Received June 1, 1903.

"Seeds of the Coyol palm. A large variety, growing to a height of 40 feet. Produces wine and vinegar. Seeds good for cattle and hogs." (*Dean.*)

9777.

From Honduras. Presented by Mr. Frank Dean, Black River. Received June 1, 1903.

"A climber, with flowers like the *Allamanda;* yellow, with red center. Fine plant. Name unknown." (*Dean.*)

9778 to 9789.

From Khojend, Russian Central Asia. Presented by Mr. E. M. Valneff, of Khojend, through Mr. E. A. Bessey. Received June 17, 1903.

A collection of seeds, as follows:

9778. Pistacia vera. **Pistache.**

From Hissar, Bokhara. Crop of 1902.

9779. Andropogon sorghum. **Sorghum.**

Djougara.

9778 to 9789—Continued.

9780. Sesamum indicum. **Sesame.**

Seed of mixed colors.

9781. Triticum vulgare. **Wheat.**

Winter wheat.

9782. Triticum vulgare. **Wheat.**

Spring wheat.

9783. Hordeum vulgare. **Barley.**

Spring barley.

9784. Chaetochloa italica. **Millet.**

9785. Panicum miliaceum. **Broom-corn millet.**

9786. Phaseolus mungo. **Mung bean.**

9787. Carthamus tinctorius. **Safflower.**

9788. Medicago sativa. **Alfalfa.**

9789. Linum usitatissimum. **Flax.**

Grown for oil making.

9790 to 9800.

From Tashkent, Russian Central Asia. Presented by Mr. H. W. Dürrschmidt, seedsman, of Tashkent, through Mr. E. A. Bessey. Received June 17, 1903.

A collection of seeds, as follows:

9790. Triticum vulgare. **Wheat.**

Alabjurag winter wheat.

9791. Triticum vulgare. **Wheat.**

Iantagbay or *Yantagbay.*

9792. Triticum vulgare. **Wheat.**

Kisilbugday.

9793. Triticum vulgare. **Wheat.**

Tschulbugday. Grown in winter on irrigated land.

9794. Triticum vulgare. **Wheat.**

Aulieata. Grown in winter on unirrigated land.

9795. Zea mays. **Corn.**

Kukurusa.

9796. Andropogon sorghum. **Sorghum.**

Dshugara Balchá.

9797. Sesamum indicum. **Sesame.**

Mixed brown and white.

9798. Panicum miliaceum. **Broom-corn millet.**

9790 to 9800—Continued.

9799. CHAETOCHLOA ITALICA. **Millet.**

Kunak.

9800. CARTHAMUS TINCTORIUS. **Safflower.**

9801. ERIOBOTRYA JAPONICA. **Loquat.**

From Yokohama, Japan. Presented by the Yokohama Nursery Company at the request of Messrs. Lathrop and Fairchild. Received June 5, 1903.

Formosa. Seed of the Formosan loquat.

9802. NEPHELIUM LITCHI. **Leitchee.**

From Canton, China. Received through Messrs. Lathrop and Fairchild (No. 792, December 20, 1901), January 30, 1902.

Hak Ip, black leaved. "This is one of the best varieties grown about Canton, China. It is said to be a large-fruited sort, of excellent flavor, but with medium-sized stone. The dried leitchees of the market here are mostly of this form. The plant is not reproduced from seed but is grafted or inarched." (*Fairchild.*)

9803. NEPHELIUM LITCHI. **Leitchee.**

From Canton, China. Received through Messrs. Lathrop and Fairchild (No. 793, December 20, 1901), January 30, 1902.

No Mai, "tender rice" leitchee. "This is a small-seeded, very superior sort, one of the favorites on the Canton market where four or five different varieties are known and where the sale of this fruit is a very important one. Dr. J. M. Swan, of the Canton Hospital, pronounces this one of the two or three best varieties known to him." (*Fairchild.*)

9804. DIOSPYROS KAKI. **Japanese persimmon.**

From Canton, China. Received through Messrs. Lathrop and Fairchild (No. 794, December 20, 1901), January 30, 1902.

Hung tsz, large red persimmon. "This is a soft variety of medium to large size, round to oblate spheroid, dark in color, and reported to be very sweet in flavor. It is imported as being probably a Chinese variety and worthy of trial in comparison with the Japanese sorts." (*Fairchild.*)

9805. AMYGDALUS PERSICA. **Peach.**

From Canton, China. Received through Messrs. Lathrop and Fairchild (No. 795, December 20, 1901), January 30, 1902.

Hung Wat tim. "A variety of the 'Honey' type, reported to be good for preserves and not so sweet as the *Ying tsui* or Eagle Beak variety. It is medium early. Worthy of trial as coming from the south China region, though probably not of superior excellence." (*Fairchild.*)

9806. PRUNUS sp. **Plum.**

From Canton, China. Received through Messrs. Lathrop and Fairchild (No. 796, December 20, 1901), January 30, 1902.

Hung Mui. "A large red plum, fairly sweet, but of the hard-fleshed type. Like the other Chinese plums about Canton it is said to have a somewhat bitter taste when cooked and allowed to stand for an hour or so. Europeans in Canton do not prize these Chinese plums very highly. This variety blooms in February or March." (*Fairchild.*)

9807. BAMBUSA sp. **Bamboo.**

From Canton, China. Received through Messrs. Lathrop and Fairchild (No. 797, December 20, 1901), January 30, 1902.

Kam Chuk, golden bamboo. "The most beautiful of all the bamboos about Canton, a golden-stemmed sort, with stripes of green. It is rather rare on the island of Hongkong, I am told by Mr. Ford, and it is not very common about Canton. It is worthy of trial in Florida and southern California." (*Fairchild.*)

9808. MANGIFERA INDICA. **Mango.**

From Mussorie, India. Presented by Rev. H. Marston Andrews, principal of Woodstock College. Received August 8, 1903.

Malda. Said to be of very large size and spicy flavor.

9809. VITIS RUPESTRIS var. METALLICA. **Grape.**

From Cape Town, South Africa. Presented by the Cape Colony department of agriculture, through Messrs. Lathrop and Fairchild (No. 1137, March 10, 1903). Received August 10, 1903.

"Plants of a South African originated variety of resistant American stock, which has proved itself most admirably suited to the conditions at the Cape and especially adapted to 'any loose soil, loam, gravel, or sand, and also in dry, open, heavy soils. It can, besides, stand a fair amount of moisture in loose soils. It forms an excellent graft bearer for all varieties of European vines except *Hanepoot* and possibly also the members of the Muscat family.' (Cf. J. P. de Waal, in the Ag. Jour. Cape of Good Hope, December 19, 1901, p. 838.) This variety, Mr. Pillans says, is the best of all the resistant stocks yet tried at the Cape, as its ease of grafting, great vigor, suitability to different kinds of soil, and grafting affinity for all but varieties of the Muscat type make it a general stock of great value. Even those who do not claim that it exceeds in vigor any other sort, admit that *it is the easiest grafted of any of the American stocks.* The stock originated at Great Constantia Wine Farm, in a lot of seedlings from seed sown in 1886. It is uncertain whether the seed came direct from America or from France. This is entirely distinct, according to F. J. Bioletti (formerly of the experiment station at Berkeley, Cal., now at the Elsenburg Agricultural School), from the *metallica* of French vineyardists. Its name applies to the luster of its foliage. The seedling was picked out in 1894, and by quick propagation in 1901 yielded 687,000 cuttings. In 1902, 864,000 cuttings were distributed. It has been tested side by side with many French stocks, such as *Aramon rupestris*, *Riparia Gloire de Montpellier*, and takes its place as their equals in all points and their superior as regards ease of propagation and suitability to the varieties of soils mentioned. Mr. Pillans goes so far as to predict that it will drive all other sorts out except for Muscat sorts. He claims for it a remarkable yield-giving power, extreme vigor, and resistance to the phylloxera. Mr. Bioletti admits its excellent qualities, and practical growers are enthusiastic about it. This is well worth the serious consideration of California vine growers. The originators of this remarkable seedling are Messrs. J. P. de Waal and Eustace Pillans, of the Cape of Good Hope department of agriculture, and its trial in California should be made at once. We are indebted to Mr. Pillans for the plants sent. See No. 9607, the identical variety." (*Fairchild.*)

9810 to 9814. VITIS sp. **Grape.**

From Cape Town, South Africa. Presented by the Cape Colony department of agriculture, through Messrs. Lathrop and Fairchild (No. 1149 to 1151, and 1153, March, 1903). Received August 10, 1903.

9810. VITIS VINIFERA.

Red Hanepoot. "A variety of table grape that is believed to have originated in South Africa and which, according to Mr. Bioletti, formerly vine expert of the California Experiment Station, at Berkeley, is not known in America. The variety belongs to the *Muscat* type and may be described as a *Muscat* with the red color of the *Flaming Tokay.* It is one of the most popular of the South African varieties and is exported to England. It is an excellent shipper and a showy table sort. Sent by Mr. Eustace Pillans, from the Government vineyard at Constantia." (*Fairchild.*) (No. 1149.)

9811. VITIS VINIFERA.

Hermitage. "This is the grape from which the Cape claret is made. It is said by experts to rank high as a claret maker and not to have been tested in California. Mr. Bioletti, formerly of the California Experiment Station at Berkeley, Cal., remarks (in the Cape Journal of Agriculture, Vol. XX, No. 12, p. 696), that the Cape *Hermitage* is distinct from the sort grown in the Hermitage vineyards of France and is not so good as the *Shiraz* or *Sirah* grape, which is well known to Californians." (*Fairchild.*) (No. 1150.)

9810 to 9814—Continued.

9812. VITIS RUPESTRIS.

Le Roux. "A variety of American phylloxera-resistant stock which, according to de Waal (in the Cape Agricultural Journal, Vol. XIX, No. 13, p. 839), originated from a seedling, selected by Mr. J. G. Le Roux, of Klein, Drakenstein, Paarl. It requires a loose loam, gravel, or sand, and also grows in dry, open, heavy soils as well. *It is especially suitable as a stock for the Hanepoot and very likely also for the other Muscat varieties*, and is a good general grafting stock. Mr. Bioletti, formerly of the California Experiment Station at Berkeley, Cal., thinks this sort will be keenly appreciated in California for a stock for Muscat varieties." (*Fairchild.*) (No. 1151.)

9813. VITIS RUPESTRIS.

Pillans. "A variety of resistant American stock which has been selected by Mr. Eustace Pillans, agricultural assistant in charge of the Government wine farm at Constantia. Mr. Pillans thinks this will prove an excellent stock for the Muscat varieties of grape and, although it has not yet been thoroughly tested, he predicts its general use for this class of vines. The *Hanepoot*, which is of the *Muscat* type, does well on it. These cuttings are sent by Mr. Pillans himself." (*Fairchild.*) (No. 1153.)

9814. VITIS VINIFERA.

White Hanepoot. "Probably descended from the *White Muscat.*" (*Fairchild.*)

9815. AMYGDALUS PERSICA. **Peach.**

From Constantia, South Africa. Presented by the Cape Colony department of agriculture through Messrs. Lathrop and Fairchild (No. 1152, March 16, 1903). Received August 10, 1903.

Constantia. "A variety of peach which originated at Constantia. It is said by Mr. Eustace Pillans to be an excellent shipping variety, of good quality and one of the best sorts grown in Cape Colony. It deserves a trial in the collections of California and Georgia, but may not prove hardy enough for Maryland, Delaware, or Michigan. Sent by the Cape department of agriculture." (*Fairchild.*)

9816. MEDICAGO SATIVA. **Alfalfa.**

From Willard, Utah. Received through Mr. P. A. Nebeker, June 9, 1903.

Turkestan alfalfa seed grown by Mr. Nebeker under agreement with the Department of Agriculture from imported seed (S. P. I. No. 991), furnished him in 1900.

9817. TRIFOLIUM PANNONICUM.

From Erfurt, Germany. Received through Haage & Schmidt, July 17, 1903.

Seed from the 1902 crop.

9818 to 9823.

From Heneratgoda, Ceylon. Received through J. P. William & Bros., July 31, 1903.

Seeds of trees for arid regions, as follows:

9818. CASUARINA EQUISETIFOLIA.

9819. DALBERGIA SISSOO.

9820. ALBIZZIA PROCERA.

9821. ALBIZZIA LUCIDA.

9822. ALBIZZIA JULIBRISSIN.

9823. EUCALYPTUS GLOBULUS.

9824 to 9826.

From Santiago, Chile. Presented by Federico Albert, of the ministry of industry and public works. Received July 9, 1903.

Seeds as follows:

9824. ARAUCARIA IMBRICATA.

9825. JUBAEA SPECTABILIS.

9826. BELLOTA MIERSII.

9827. PINUS PINEA. **Umbrella pine.**

From Rome, Italy. Presented by Hon. Hector de Castro, United States Consul-General. Received August 7, 1903.

9828 to 9830.

From Monte, Grand Canary, Canary Islands. Presented by Mr. Alaricus Delmard, through Messrs. Lathrop and Fairchild. Received August 14, 1903.

Seeds as follows:

9828. CANARINA CAMPANULA var. CANARIENSIS.

9829. PAPAVER sp.

9830. PINUS CANARIENSIS.

9831 to 9850.

From Mexico. Secured by Mr. G. Onderdonk, special agent of this Department, and sent to G. L. Taber, Glen St. Mary, Fla., for propagation.

9831 to 9846. PRUNUS ARMENIACA. **Apricot.**

9831. Onderdonk's No. 1, Taber's No. 1.

From garden of Crispin Mariscal, Coyoacan, Distrito Federal. Freestone; 4 inches in circumference; blush; rich; sweet; season, May.

9832. Onderdonk's No. 2, Taber's No. 2.

From garden of Crispin Mariscal, Coyoacan, Distrito Federal. Freestone; 4½ inches in circumference; blush; rich; sweet; season, May.

9833. Onderdonk's No. 3, Taber's No. 3.

From garden of Crispin Mariscal, Coyoacan, Distrito Federal. Freestone; 4½ inches in circumference; blush; rich; sweet; season, May.

9834. Onderdonk's No. 4, Taber's No. 4.

From garden of Crispin Mariscal, Coyoacan, Distrito Federal. Clingstone; 3¾ inches in circumference; blush; rich; sweet; season, May.

9835. Onderdonk's No. 5, Taber's No. 5.

From garden of Crispin Mariscal, Coyoacan, Distrito Federal. Freestone; 4½ inches in circumference; blush; rich; sweet; season, May.

9836. Onderdonk's No. 6, Taber's No. 6.

From garden of Crispin Mariscal, Coyoacan, Distrito Federal. Fruit not yet grown. Season, August 1.

9837. Onderdonk's No. 7, Taber's No. 7.

From garden of Carlos Ortero, San Angel, Distrito Federal. Fruits not fully grown; 5 inches in circumference; fine; season, June. Twelve buds inserted, all dead July 15, 1903. Mr. Onderdonk states that the trees do not make a vigorous growth, literally bearing themselves to death. He promised to furnish Mr. Ortero a tree if any lived, as he was permitted to take all the bud wood there was on the tree. Wood altogether too young when taken. Freestone; yellow; blush.

9831 to 9850—Continued.

9831 to 9846—Continued.

9838. Onderdonk's No. 8, Taber's No. 8.

From garden of Martin Velasco, San Angel, Distrito Federal. Freestone; 4½ inches in circumference; cream yellow; blush; season, June 1.

9839. Onderdonk's No. 9, Taber's No. 9.

From garden of Hilario Abilo, Contreras, Distrito Federal. Freestone; 6¾ inches in circumference; cream colored; blush; sweet; season, May 25 to June 1.

9840. Onderdonk's No. 10, Taber's No. "A."

From J. R. Silliman, Saltillo, Coahuila. Variety, *Perry*. Unripe fruit six inches in circumference; cream colored; blush.

9841. Onderdonk's No. 11, Taber's No. "B."

From Santa Anita gardens, near Saltillo. Fruit 4½ inches in circumference; yellow; blush; sweet; season, May.

9842. Onderdonk's No. 12 (or 13), Taber's No. "C."

From Santa Anita gardens, near Saltillo. Fruit 5½ inches in circumference when not fully grown; yellow; blush; season, June 5.

9843. Onderdonk's No. 13 (or 12), Taber's No. "D."

From J. R. Silliman, Saltillo, Coahuila. Unripe, 4½ inches in diameter; highly recommended by Mr. Silliman; season, July. Mr. Taber writes that the packages containing these last two numbers were both marked 12, so that it is not possible to tell which should be 12 and which 13.

9844. Onderdonk's No. 15, Taber's No. 15.

Probably from garden of J. R. Silliman, Saltillo, Coahuila. A very fine apricot, 5½ inches in circumference; yellow; blush; season, May 25; named *Nellie* for owner's daughter.

9845. Onderdonk's No. 16, Taber's No. 16.

Probably from garden of J. R. Silliman, Saltillo, Coahuila. A very fine apricot; 5½ inches in circumference; yellow; blush; season, June 1; named *Dorah* for owner's daughter.

9846. Onderdonk's No. 17, Taber's No. 17.

From garden of Henrique Maas, Saltillo, Coahuila. Said to be a very fine large variety. Season about July 5.

9847. PRUNUS CERASUS. **Cherry.**

Onderdonk's No. 14, Taber's No. 14. Mr. Onderdonk writes that this is the Capulin cherry but does not state where the buds were secured.

9848 to 9850. AMYGDALUS PERSICA. **Peach.**

9848. Onderdonk's No. 11, Taber's No. 11.

From garden of Carlos Ortero, San Angel, Distrito Federal. A large, yellow, blush, clingstone.

9849. Onderdonk's No. 12, Taber's No. 12.

From garden of Carlos Ortero, San Angel, Distrito Federal. A yellow, blush, freestone.

9850. Onderdonk's No. 13, Taber's No. 13.

From garden of Martin Velasco, San Angel, Distrito Federal. A large, white, blush, clingstone.

9851. PRUNUS CERASUS (?). **Cherry.**

From Mexico. Received through Mr. G. Onderdonk, June 29, 1903, by Mr. W. A. Taylor, pomologist in charge of field investigations.

Capulin.

9852. ANDROPOGON SORGHUM. **Kafir corn.**

From Durban, Natal. Presented by Mr. Claude Fuller, Government Entomologist, through Messrs. Lathrop and Fairchild (No. 1193a, August 5, 1903). Received August 31, 1903.

Mahele or *Mapele.* "This variety has proved more resistant than any other to a species of aphis which injures all the common sorts." (*Fairchild.*)

9853 and 9854. TRITICUM DURUM. **Wheat.**

From Poona Farm, Kirki, India. Sent by the superintendent through Latham & Co., Bombay, India, addressed to Dr. S. A. Knapp. Received July 23, 1903.

9853.

Piola Karte. From Shuedrager (?).

9854.

Shet Gahu. From Poona.

9855 and 9856. ANDROPOGON SORGHUM. **Sorghum.**

From Poona Farm, Kirki, India. Sent by the superintendent through Latham & Co., Bombay, India, addressed to Dr. S. A. Knapp. Received July 13, 1903.

9855.

Gidgep Jowar.

9856.

Dagdi Jowar.

9857. CASTILLA sp. nov.

From Costa Rica. Presented by Mr. Guy N. Collins, of the Department of Agriculture, June 16, 1903.

Seed of a new species of great promise as a rubber producer.

9858. THEOBROMA sp. nov. **Cacao.**

From Costa Rica. Presented by Mr. Guy N. Collins, of the Department of Agriculture, June 16, 1903.

Seeds of a new species.

9859. CASSIA AURICULATA. **Avaram.**

From Manamadura, South India. Presented by Rev. Edward P. Holton, through Miss Nina G. Holton, of this Department. Received September 5, 1903.

Grown and used extensively in South India; the bark for tanning, the leaves, twigs, and seed pods as a fertilizer for salt lands, wet cultivation. Habit, low and brushy like a blueberry bush on rocky, sandy, dry, waste lands.

9860. CYPERUS NUTANS. **Matting rush.**

From Japan. Received through Mr. R. H. Sawyer, Kennebunk, Me., July 23, 1903.

Cultivated in the rice fields of Japan. Straw dried and used in the manufacture of the coarser, cheaper grades of Japanese matting.

9861. CYPERUS TEGETIFORMIS. **Matting rush.**

From China. Received through Mr. R. H. Sawyer, Kennebunk, Me., July 23, 1903.

Native in salt marshes along the coast of China. Three-cornered rush split, dried, and used in manufacture of Chinese floor matting.

9862. ANDROPOGON SORGHUM. **Sorghum.**

From the Sudan, Africa. Presented by Dr. L. Trabut, Government Botanist, 7 Rue des Fontaines, Mustapha, Algiers, Algeria. Received September 14, 1903.

A few seeds of a strain originated in the Sudan. Recommended by Doctor Trabut as of extraordinary size and quality.

9863. PYRUS MALUS. **Apple.**

From Stockholm, Sweden. Presented by Mr. Axel Pihl, secretary of the Swedish Pomological Society, through Messrs. Lathrop and Fairchild. Received September 22, 1903.

Salems. "A newly-discovered variety, promising because of its hardiness and ability to live on poor soils." (*Fairchild.*)

9864. TRIFOLIUM PANNONICUM.

From Erfurt, Germany. Received through Haage & Schmidt September 26, 1903.

9865. SECALE CEREALE. **Rye.**

From Stockholm, Sweden. Received through Mr. J. E. W. Tracy, of this Department, August 17, 1903.

Wasa. Three small samples, from different seed houses. As the bags containing two of the samples were broken and the seed mixed, it was decided to give but one number to the three samples. (1 sample from Sellberg & Co., Stockholm; 1 sample from Öhmans, Söner & Co., Stockholm; 1 sample from another seed house.)

9866. EUPHORBIA PULCHERRIMA var. PLENISSIMA. **Poinsettia.**

From Hope Gardens, Kingston, Jamaica. Presented by Prof. William Fawcett, director, through Messrs. Lathrop and Fairchild. Received October 8, 1903.

"In 1898 Mr. Barbour Lathrop noticed a single plant of this variety growing in the Hope Botanic Gardens, of Kingston, Jamaica. Although he had seen the double variety of this plant in many places in the Tropics and in greenhouses, nowhere had he observed a plant with such unusually full whorls of colored bracts. The plant in its full glory was a perfect blaze of color, forming one of the handsomest decorative shrubs for landscape purposes that we have ever seen. The writer is inclined to believe that this is a strain from the ordinary double poinsettia, and that it can be propagated from cuttings. Its special beauty may possibly have been, however, produced by specially favorable soil conditions in Jamaica. If the former presumption is true, this will probably prove a very valuable strain for park use in those regions of the South where it will grow, and it may even prove superior to the ordinary type for greenhouse culture. It is worthy of a serious trial, both out of doors and under glass. Under notes L. and F., No. 56, in 1898, the Department's attention was called to this variety." (*Fairchild.*)

9867. PRUNUS LAURO-CERASUS. **Cherry laurel.**

From Trebizond, Turkey. Presented by Mrs. Julia F. Parmelee. Received October 9, 1903.

Kara yemish. Five plants brought by Mrs. Parmelee from Trebizond to Dunkirk, N. Y. Given to the Department through Mr. W. A. Taylor, pomologist in charge of field investigations.

9868. OCIMUM VIRIDE.

From Kew, England. Presented by the director of the Royal Botanic Gardens, Kew. Received October 9, 1903.

Obtained at the request of Dr. L. O. Howard, Entomologist of this Department, for experiments on the effect of this plant upon mosquitoes.

9869. GARCINIA MANGOSTANA. **Mangosteen.**

From Heneratgoda, Ceylon. Received through J. P. William & Bros., October 19, 1903.

"One thousand seeds of this most delicious of tropical fruits, which, it is believed, will prove of great commercial value to the fruit-growing interests of Porto Rico." (*Fairchild.*)

9870. PERSEA INDICA.

From Madeira. Presented by Mr. J. B. Blandy, through Mr. D. G. Fairchild. Received October 15, 1903.

"This tree is a native of the Canary Islands, and is hardier than the alligator pear. It is introduced for the purpose of testing it as a stock upon which to graft *Persea gratissima.* According to the statement of one of the principal growers in Florida, such a stock is especially desired, because the trunk of the young alligator pear is its weakest part." (*Fairchild.*)

9871. TRITICUM VULGARE. **Wheat.**

From Erivan, Caucasus, Asiatic Russia. Received through Mr. E. A. Bessey (No. 300, August 24, 1903), October 21, 1903.

"Red wheat from the mountains near Erivan. It is grown without irrigation and is sown in March. It should be tried in dry mountain regions." (*Bessey.*)

9872. TRITICUM DURUM. **Wheat.**

From Erivan, Caucasus, Asiatic Russia Received through Mr. E. A. Bessey (No. 301, August 24, 1903), October 21, 1903.

Galgalos. "A variety of macaroni wheat which is said to be very good. It is prized for flour. It brings 30 kopecks a pood more than No. 9871. It is also grown without irrigation in the mountains. It is mostly grown as a winter wheat, being sown in October. It is also sown early in March." (*Bessey.*)

9873. JUNCUS EFFUSUS. **Matting rush.**

From Kobe, Japan. Presented by Dr. A. G. Boyer, of the United States consulate at Kobe. Received October 25, 1903.

Seed of the round Japanese matting rush. This seed was picked from the plants which are growing for next year's crop of matting grass, i. e., from roots that are 2 years old. The seed ripens in July.

9874 to 9876. TRIFOLIUM ALEXANDRINUM. **Berseem.**

From Cairo, Egypt. Secured through the courtesy of Mr. George P. Foaden, of the Khedivial Agricultural Society. Received November 7, 1903.

9874.

Muscowi.

9875.

Fachl.

9876.

Saida.

9877. HORDEUM VULGARE. **Barley.**

From Cairo, Egypt. Secured through the courtesy of Mr. George P. Foaden, of the Khedivial Agricultural Society. Received November 7, 1903.

Mariut.

9878. AVENA SATIVA. **Oat.**

From Paris, France. Received through Vilmorin-Andrieux & Co., November 9, 1903.

Belgian winter.

9879. GARCINIA COCHINCHINENSIS.

From Saigon, Cochin China. Presented by M. E. Haffner, director of agriculture of Cochin China, through Messrs. Lathrop and Fairchild. Received November 11, 1903.

"A species of *Garcinia* which is closely related to the mangosteen, and upon which it is hoped this delicious fruit tree can be grafted. This species is said to be much less limited in its range of soil and climatic conditions, and it may prove a valuable stock for the mangosteen." (*Fairchild.*)

9880. GARCINIA FERREA.

From Saigon, Cochin China. Presented by M. E. Haffner, director of agriculture of Cochin China. Received November 11, 1903.

"A species of *Garcinia* introduced for the same purpose as No. 9879, as a stock for the mangosteen." (*Fairchild.*)

9881. GARCINIA MANGOSTANA. **Mangosteen.**

From Heneratgoda, Ceylon. Received through J. P. William & Bros., November 11, 1903. Shipped from Ceylon August 31, 1903. A wardian case full of plants of this delicious tropical fruit.

9882. AMYGDALUS PERSICA var. NECTARINA. **Nectarine.**

From Marplan, Turkestan. Presented by Prof. Ralph Pumpelly. Received November 11, 1903.

Five seeds of a variety of nectarine which Professor Pumpelly describes as a very delicious, large sort, which was abundant in that portion of Turkestan. Professor Pumpelly's first impression was that this was a smooth-skinned peach, thinking that the nectarine would not be likely to occur in that portion of Turkestan.

9883. CLERODENDRON FOETIDUM.

From Cape Town, South Africa. Presented by Prof. P. MacOwan, of the Cape department of agriculture. Received November 9, 1903.

A hardy, ornamental bush 3 to 6 feet in height, said to be hardy in the Middle and Southern States and not new to this country.

9884 to 9886.

From Guadalajara, Mexico. Presented by Mr. Federico Chisolm. Received November 16, 1903.

Seeds of native Mexican plants as follows:

9884. DAHLIA sp. **Wild dahlia.**

Dwarf, leaves very thickly covered with fine prickly hairs, flowers on stem 24 to 48 inches tall, have a diameter of 1½ to 2 inches, petals blood red, with very high glaze, center yellow.

9885. **Tuberose (?)**

Chicalam. Small bulb, one or two slender, round leaves 12 to 36 inches long. Flowers exquisite, colored like a fuchsia, in clusters on slender, round stem 12 to 40 inches high. Blooms July, August, and September. (Doctor Rose says this is probably a tuberose.)

9886.

Bulb with leathery leaves splotched with brown. Flowers green, not valuable, August. Leaves sometimes 12 inches long by 4 inches broad. May be useful for foliage. Doctor Rose says probably *Amole* (*Chlorogalum pomeridianum* or *Agave americanum*).

9887. SECALE CEREALE. **Rye.**

From North Watergap, Pa. Received through Mr. M. L. Michael, November 14, 1903.

Winter Ivanof. Grown in 1903 from S. P. I. No. 1342.

9888. TRICHOLAENA ROSEA.

From Honolulu, Hawaii. Presented by Mr. Jared G. Smith, special agent in charge of the Hawaiian agricultural experiment station. Received November 23, 1903.

9889 and 9890. PHASEOLUS VIRIDISSIMUS. **Bean.**

Grown from S. P. I. No. 6430, in 1903.

9889. Received through Mrs. Hattie L. Asseltine, Fruithurst, Ala., November 28, 1903.

9890. Received through Mr. John J. Dean, Moneta, Cal., December 4, 1903.

The California grown seed is noticeably larger than that grown in Alabama.

9891. EUTREMA WASABI. **Japanese horse-radish.**

From Yokohama, Japan. Presented by Mr. H. Suzuki, of the Yokohama Nursery Company, through Messrs. Lathrop and Fairchild. Received December 7, 1903.

"Described in B. P. I. Bulletin No. 42. The Japanese horse-radish, which is eaten with raw fish as commonly in Japan as ordinary horse-radish is eaten in America with raw oysters." (*Fairchild.*)

9892. ATRIPLEX LEPTOCARPA. **Saltbush.**

From Sydney, Australia. Received through Anderson & Co., December 5, 1903.

9893. DESMODIUM TRIFLORA.

From Mayaguez, Porto Rico. Sent by Mr. G. N. Collins, of the Department of Agriculture, through Mr. D. G. Fairchild. Received December 14, 1903.

This plant is used as a soil covering on the coffee plantations in Porto Rico.

9894 to 9896.

From Tanegashima, Japan. Presented by Mr. R. Chester, through Mr. R. B. Handy, of this Department. Received December 12, 1903.

Native Japanese seeds, as follows:

9894. **Red jessamine.**

One-half ounce of seed that looks like four-o'clocks.

9895. **Lily.**

Very decorative.

9896.

A few seeds, without name or other data.

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